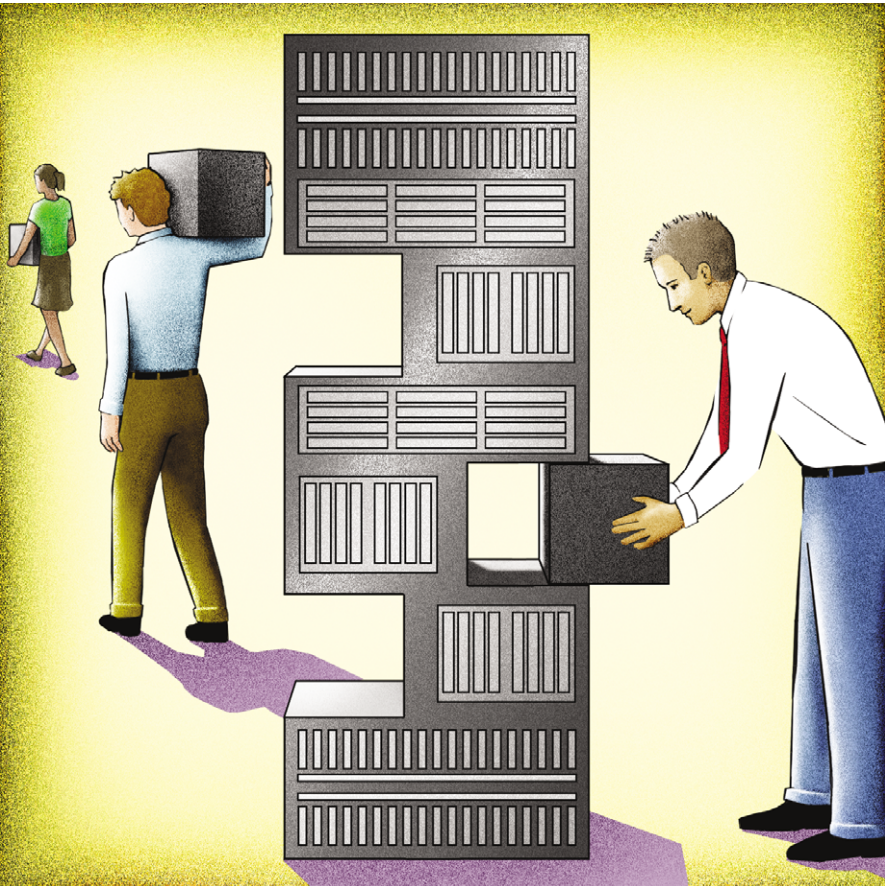


Services: The Right Option?

SMEs Should Consider Certain Factors
Before Using Third-Party Services



by Elizabeth Millard

• • •

IN THEORY, outsourcing always sounds like a beautiful arrangement: For a certain chunk of money, you can wipe tasks off your to-do list forever, including data center cleaning, regular data backups, and network maintenance.

But before an IT manager attempts to dole out every data center task, it's important to recognize exactly what's needed. Sometimes, the items on a chore sheet aren't worth the hassle of lining up someone else to do them and are actually fundamental for keeping an eye on overall data center operations.

With the services that are ripe for outsourcing, though, several major factors go into the decision-making process, including cost, guarantees, and reliability. But there are also pitfalls to avoid, such as hidden line items and more management. When taking a look at third-party services, the trick is to consider all the advantages and sidestep the potential headaches.

Cost-Benefit Analysis

With budgets growing ever tighter, the largest factor when it comes to using third-party services is cost. An initial run-through of the numbers should determine whether it's less expensive to have a service provider do the work, such as data storage, or to handle the major task in-house.

When coming up with these numbers, it's important to factor in not just the labor cost of an IT employee but also equipment costs in the long term.

Go to Page 10

Doing More With Less

Consolidation, Deduplication & Other Ways
To Make The Most Of Your Storage

by Sixto Ortiz Jr.

• • •

WITH TODAY'S challenging budgets, it's becoming increasingly difficult to secure the dollars needed to procure new technologies. But some technologies are too essential for the enterprise, leaving little wiggle room for skimping on resources for these technologies.

Take storage, for example: An increasing dependence on storage within the enterprise and its importance in meeting regulatory data storage and archival requirements mean that, even under the onslaught of

budget challenges, enterprises cannot afford to take monetary shortcuts with their storage infrastructures.

So, what's Joe Administrator to do when management clamors for budget cuts even as requirements for maintaining storage

infrastructures continue to increase? Well, one general solution is to leverage new storage technologies that allow administrators to get more out of their existing storage assets. And thankfully, there are a number of approaches that allow administrators to wring more returns out of their existing storage assets.

What, then, are the main challenges facing administrators today when it comes to storage? Most experts agree that one of the main challenges is the ongoing growth of data. Tom Grave, director of product management for Diligent Technologies (www.diligent.com), a wholly owned subsidiary of IBM, says handling rapid data growth; managing costs, backup, and recovery operations; and implementing offsite data protection are all challenges administrators are facing. In addition, he adds, recent

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There are a number of approaches that allow administrators to wring more returns out of their existing storage assets.

In This ISSUE

COVER FOCUS

Data Center Services

We help you decide whether third-party services are the right choice for your enterprise and then offer tips and advice for the types of services available and how to find the best service provider for you.

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Even under the onslaught of budget challenges, enterprises cannot afford to take monetary shortcuts with their storage infrastructures.

A Data-Centric Security Model | 25

Many businesses now realize that rather than continuing to add layers of infrastructure security, it's more effective to protect critical data throughout its life cycle, regardless of where it resides or moves.

Keeping IT Projects On Track | 26

While no one thing gets an IT project off the ground, keeps it on course, and brings it to maturity before it runs out of fuel, implementing the proper mix of steps can bring a project closer to completion.

Systems Management: A Strategic Approach | 27

The time has come for IT—and data centers—to analyze their service offerings using systems management software and then report back to the business in a more strategic way.

Product Releases | 17

■ **Apposite** announced its new WAN emulation appliance, Linktropy 4.0. ■ **Atempo** announced its Atempo Digital Archive for Messaging 2.0 email and instant messaging archive software. ■ **Lenovo** introduced Lenovo Asset Recovery Services, a set of services to help businesses manage their end-of-life technology equipment. ■ **LiveOffice** announced its new email archiving service designed for business and public organizations, LiveOffice Mail Archive. ■ **Neverfail** announced Neverfail ClusterProtector, the latest addition to the Neverfail Continuous Availability Suite. ■ **Palo Alto Networks** has announced the addition of the PA-2000 series of midrange platform firewalls to its product family. ■ A server virtualization solution for Intel-powered Mac systems, the Parallels Server for Mac, is now available from **Parallels**. ■ **Process Software** released SpyCatcher Enterprise v5.1, a spyware detection engine.

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The Processor.com home page is updated each week with new articles and hardware news to help you keep current.
Visit www.processor.com today.

Meet The Newest RAID

NetCom USA Introduces RAID Storage Systems For Critical Data

THE **NR6** FAMILY of RAID storage systems is the newest member of NetCom USA's storage solution offerings. Available in capacities of 2, 4, and 8TB with data transfer speeds up to 400MBps, NR6 storage systems are a fast, reliable solution for storage of mission-critical data.

NetCom USA's NR6 family of storage products is ideal for increased network storage capacity, medical image storage,



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Businesses generate more data than ever before and require fast, continuous access to their information. The NR6 family of

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NetCom USA provides proven RAID technologies for data protection that secures information and ultra-fast access to data for increased productivity.

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NetCom NR6 RAID Storage Systems

Starts at \$4,649

Available in capacities of 2, 4, and 8TBs with transfer speeds up to 400MBps

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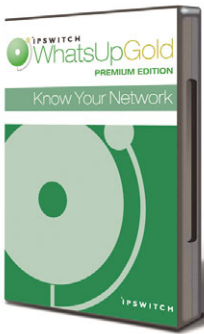


Network Monitoring For SMEs & Beyond

Ipswitch's WhatsUp Gold Version 12 Gets Bigger & Better

BUSINESSES GROW CONSTANTLY, and networks must adjust to changing demands. Yet, as important as it is for a network to be able to scale upward, every company has to start somewhere. Having network management tools that can grow with a business from a small enterprise to a large one is valuable.

WhatsUp Gold from Ipswitch has been addressing this issue for over 15 years. The most recent version, WhatsUp Gold 12, has added several new features, including Split Second Graphs, which allow administrators to more quickly identify any problems and take proactive steps toward resolving issues—in seconds,



not minutes. Additionally, real-time data can be added to full reports to give administrators a more complete picture of network health, which is continuously updated as real-time information flows in.

Through the various workspace views, administrators can see current device usage data via the InstantInfo pop-ups feature just by hovering the cursor over device or network interface links. Also new are the Web Task Manager and Web Performance Monitor, Web-based tools that extend the functionality of Windows tools to every user.

WhatsUp Gold is designed to provide easy-to-use management and monitoring

interfaces, transparent upgrade paths, and low total cost of ownership. With a bevy of plug-ins on the way, WhatsUp Gold can be expanded to suit the needs of any enterprise.

Ipswitch WhatsUp Gold v12

Standard: \$1,995
Premium: \$2,595
Distributed: \$3,095
MSP: \$2,790

Network monitoring software for any size enterprise

(800) 793-4825

www.whatsupgold.com



Secure Mobile Computing

Dolphin 7600 Now Includes GSM Wireless Technology & Windows Mobile 6

MOBILITY IS A MUST for business professionals. To access important data at any time is invaluable, which is why Honeywell Imaging and Mobility equipped its Dolphin 7600 Mobile Computer with GSM wireless technology and Microsoft's Windows Mobile 6.

With GSM wireless technology, the Dolphin 7600 allows users to stay connected no matter where they are. Wireless Full Area Networking, combined with Bluetooth, 802.11, and GSM/GPRS EDGE, enables real-time data exchange and voice communications onsite or offsite.

The addition of Windows Mobile 6 enables users to be productive while they're traveling, with connections to email, calendars, and contacts. Windows Mobile 6 also has the ability to read and create Word and Excel files, as well as view PowerPoint presentations. The familiarity of a Windows operating system makes mobile computing simple and intuitive.

The Dolphin 7600 uses a 2.8-inch VGA color display for both viewing and



touchscreen use. Its backlit number and letter keypad is strategically arranged to enable one-handed operation. The Dolphin 7600's small, ergonomic design and durable construction is useful in both field and onsite operation.

In addition to its new features, the Dolphin 7600 Mobile Computer is integrated with Adaptus Imaging Technology 5.0, which allows users to capture a wide array of data such as bar codes, digital images, and signatures. This feature is especially useful for retail, parcel and postal delivery, field services, and task management applications.

Honeywell Dolphin 7600 Mobile Computer

Handheld mobile computer equipped with GSM wireless technology and Windows Mobile 6

(880) 582-4263

www.honeywell.com/aidc



RapidNetRail

HellermannTyton & Damac Products Work Together To Provide One Innovative Solution

THE **RAPIDNETRAIL** system from HellermannTyton and Damac Products helps maximize your data center space. The system supports HellermannTyton's RapidNet pre-terminated network cabling solution and Damac Products' Extreme and Co-Location Series cabinets.

This solution uses zero rack mount space by incorporating RapidNet within the 19-inch cabinet rails. RapidNetRail features a patented quick-mount rail design that allows for cassette adds, moves, and changes without interrupting rack-mounted equipment in a fully populated cabinet. It's designed to accommodate both overhead and raised floor cable routing while still maintaining a 24-inch wide footprint.

These rails meet the EIA 310-D industry standards and still maintain a 19-inch rackable surface. Ports can be put where you need them to align connectivity with your servers. Up to 24 RapidNet looms can be installed in either copper and/or fiber combinations, with a maximum of 144 ports for copper and a maximum of 288 ports for fiber.



HellermannTyton's RapidNet pre-terminated plug-and-play system does not require onsite termination or certification testing; it's been verified to reduce installation time by 85% over traditional methods. RapidNet is available in copper and fiber modular configurations and offers performance and reliability for critical applications.

You can choose from two Damac Products storage cabinets: the Co-Location cabinet is a secure, multiple compartment cabinet designed for a co-location environment, and the Extreme Series supports the high equipment density demands you find in data centers.

RapidNetRail

A system combining pre-terminated network cabling and a choice of cabinets

Damac Products: (888) 949-2289
HellermannTyton: (800) 822-4352

www.damac.com www.hellermann.tyton.com

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PRODUCTS, INC.

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NEWS



PC Shipments To Grow More Than Expected

ACCORDING TO analysts at IDC, global PC shipments for this year are on track to grow 15.2%, which is higher than IDC’s March estimate of yearly growth of 12.8%. The firm also predicts laptop shipments will peak as they increase by 34.5% this year, up from last year’s 33.9% growth rate and significantly higher than next year’s projected 13.4% growth. By 2012, IDC expects portable PC shipments to only grow by 9%. Part of the dramatic growth in notebook shipments this year stems from IDC changing how it counts laptops; it now includes the fast-growing segment of inexpensive mininotebooks in its total.

Three Former Nortel Execs Charged With Fraud

MORE THAN FOUR years after the board discovered accounting irregularities at telecommunications firm Nortel Networks, the Royal Canadian Mounted Police has charged three former executives of the company with fraud. The former executives include Frank A. Dunn, former CEO; Douglas C. Beatty, former CFO; and Michael J. Gollogly, former controller. Each faces seven fraud charges, including falsifying Nortel’s books and company documents, which stem from the executives’ activities in 2002 and 2003. After Nortel’s board noticed the accounting irregularities, Dunn was fired immediately; Beatty and Gollogly were both suspended initially and then dismissed.

Former Broadcom Execs Plead Not Guilty

TWO FORMER Broadcom executives pleaded not guilty to charges of backdating stock options and falsifying documents to hide the fraud. Former CEO Henry Nicholas III and CFO William Ruehle entered the pleas in a Santa Ana, Calif., federal court. Nicholas also pleaded not guilty to federal drug charges; investigators believe he kept a stash of illegal drugs at his homes and in a California warehouse. In 2007, Broadcom took a \$2.2 billion accounting charge related to the backdating fraud. The two trials are scheduled to begin late next month.

Weak Evidence In Congressmen Hacking Attacks

COMPUTER SECURITY experts say the evidence backing up claims by U.S.

Congressmen Frank Wolf (R-Va.) and Christopher Smith (R-N.J.) that attacks on their office computers were from China is not enough to prove anything. Smith said the IT professionals who fixed his hacked PCs told his staff that the attacks originated from Chinese IP addresses, and Wolf said the FBI told him the hacking on his computers came from within China. However, computer security experts say that an IP address is not enough proof to confirm the hackers were from China. Chinese government officials have denied any involvement in the attacks.

Microsoft Acquires Navic Networks

MICROSOFT ANNOUNCED that it has purchased Navic Networks, a company designed to assist television advertisers with managing their ad campaigns. According to Brian McAndrews, Microsoft senior vice president, Microsoft hopes to “deliver addressable television advertising solutions to help [its] partners better manage media spend” through the Navic purchase. News of the acquisition comes just a short time after Microsoft’s talks with Yahoo! fell through; the software giant had been courting Yahoo! for purchase in hopes of extending its online presence.

Fortinet Buys Assets Of IPLocks

FORTINET, known for its unified threat management products, has purchased the assets of database security software vendor IPLocks. Fortinet stressed that the company did not buy the entire IPLocks company; it bought IPLocks’ intellectual property and offered jobs to the firm’s 28 employees in the United States. Financial details were not made public, but the deal will mean Fortinet gains a new product line of tools for auditing and database security, which Fortinet plans to continue selling under the IPLocks name. IPLocks Japan, the firm’s Japanese division, was not part of the purchase, so it will remain independent of Fortinet.

China Denies Reports Of An Investigation Into Microsoft

IN RESPONSE TO reports by the Shanghai Securities News that it was set to investigate Microsoft for monopolistic practices, China’s SIPO (State Intellectual Property Office) has denied that such an investigation was in action or even planned. According to a statement on SIPO’s Web site, “The Office has never undertaken any market monopoly investigation and has no plan to do so.” Microsoft added in a statement that it was unaware of any such investigation by Chinese authorities, saying, “We believe we are in compliance with Chinese law.”

Intel Invests In Solar Energy

INTEL’S NEW BUSINESS Initiatives group is spinning off a startup business with the aim of increasing development of and demand for renewable energy sources. The new company, SpectraWatt, will manufacture and supply photovoltaic cells to solar module makers; the first product shipments are expected next year. The business also hopes to improve current manufacturing processes to reduce the cost of photovoltaic energy generation, which currently costs about twice as much as retail electricity. The solar industry is expected to grow 30 to 40% annually.

HP Plans To Reorganize Its Printing Division

HP HAS ANNOUNCED it intends to reorganize its printing division in hopes of stimulating growth in its consumer and corporate printing services businesses. With the reorganization, HP will trim its printing division from five separate groups to three: large enterprises, SMEs and consumers, and graphics for large-scale printing such as billboards and signage. In addition to securing its position as a provider of quality services, HP hopes to streamline its operations, increasing revenue and decreasing costs. The printing division constitutes about 27% of HP’s revenue and about 42% of its operating profits.

U.S. Leads In Science, Technology

THE UNITED STATES remains a dominant leader in science and technology and has invested in research and development at rates similar to other parts of the world, according to a new study by RAND. The study shows that the United States accounts for 40% of the world’s spending on scientific research and development. The United States also continues to see an inflow of foreign students studying science, likely because the country has three-quarters of the world’s top 40 universities. Titus Galama, the report’s co-author, says that while much of the concern about the United States losing its edge in science and technology appears to be unfounded, the country “cannot afford to be complacent.”

Spammer Must Pay MySpace

A COURT-APPOINTED arbitrator has ordered Scott Richter to pay MySpace \$6 million—\$4.8 million in damages and \$1.2 million in legal fees—related to him sending MySpace members unsolicited email messages. MySpace sued Richter in January 2007 for using his and others’ MySpace accounts to send MySpace members email messages promoting a consumer promotions Web site. When the incidents happened in August 2006, according to the arbitrator, MySpace wasn’t equipped to handle such security problems. Richter’s company, Media Breakaway, issued a statement saying it was happy to have the matter behind it and that it respects the decision of the arbitrator.

Enterprises Uncertain Of UC’s Benefits

ACCORDING TO findings of a survey from Forrester Research, 55% of enterprises polled are uncertain of the benefits of UC (unified communications); 57% of those surveyed are evaluating UC, while 16% are rolling out UC implementations and 11% already have UC in place. Forrester analysts say they are not particularly surprised by the survey’s findings, noting that while the individual components of UC are easy to understand, the concept as a whole is difficult to clearly define, leading to uncertainty as to how UC will help the enterprise’s bottom line.

Upcoming IT Events

- JULY -

- AITP Central Idaho

July 9, 11:45 a.m.

The Owyhee Plaza

1109 Main St.

Boise, Idaho

www.boisestate.edu/dpma/dpmaci/meetings.html

• • • • •
- AFCOM Central Ohio

July 9, 5 p.m.

Gameworks

165 Easton Town Center

Columbus, Ohio

• • • • •
- ISSA Forth Worth

July 16, 11:30 a.m.

The City of Fort Worth Building

275 W. 13th Street

Fort Worth, Texas

www.issa-cowtown.org

• • • • •
- ISSA Puget Sound

July 18, 5:30 p.m.

Olympic Room,

Microsoft Main Campus

Building 27

3009 157th Place NE

Redmond, Wash.

www.issa-ps.org

• • • • •
- SANSFIRE 2008

July 22-31

Washington, D.C.

www.sans.org

• • • • •
- ISSA Baltimore

July 23, 4:30 p.m.

Sparta Inc.

7110 Samuel Morse Drive,

Suite 200

Columbia, Md.

www.issa-balt.org

• • • • •
- National Institute of Governmental Purchasing

July 26-30

Charlotte, N.C.

www.nigp.org/Events/Forum.htm

- AUGUST -

- LinuxWorld Conference & Expo

August 4-7

San Francisco, Calif.

www.linuxworldexpo.com

• • • • •
- CompTIA Breakaway Conference

August 5-7

Orlando, Fla.

breakaway.comptia.org

• • • • •
- Next Generation Data Center

August 4-7

San Francisco, Calif.

www.ngdcexpo.com

• • • • •
- AFCOM Central Texas

August 7, 11:30 a.m.

Marie Callender’s Restaurant

9503 Research Blvd.

Austin, Texas

• • • • •
- SHARE

August 10-15

San Jose, Calif.

www.share.org

• • • • •
- AITP Nashville

August 14, 5:30 p.m.

Holiday Inn-Brentwood

760 Old Hickory Road

Brentwood, Tenn.

www.aitpnashville.org

• • • • •
- AITP Washington, D.C.

August 14, 6:30 p.m.

Alfio’s Restaurant

4515 Willard Ave

Chevy Chase, Md.

aitpwashdc.ning.com

WATCH THE STOCKS

This information provides a quick glimpse of current and historical stock prices and trends for 14 major companies in the technology market.

Company	Symbol	Year Ago	June 13 \$	June 20 \$	% change from previous week
Computer Associates	CA	\$26.11	\$24.12	\$23.53	▼ 2.45%
Cisco Systems	CSCO	\$27.20	\$26.37	\$24.64	▼ 6.56%
Dell	DELL	\$27.53	\$24.42	\$23.40	▼ 4.18%
Electronic Data Systems	EDS	\$27.50	\$24.42	\$24.61	▲ 0.78%
Google	GOOG	\$509.97	\$571.51	\$546.43	▼ 4.39%
HP	HPQ	\$45.04	\$47.45	\$45.64	▼ 3.81%
IBM	IBM	\$106.09	\$126.15	\$122.74	▼ 2.7%
Intel	INTC	\$23.94	\$22.66	\$22.37	▼ 1.28%
McAfee	MFE	\$34.70	\$36.18	\$36.76	▲ 1.6%
Microsoft	MSFT	\$30.01	\$29.07	\$28.23	▼ 2.89%
Oracle	ORCL	\$19.53	\$22.63	\$22.10	▼ 2.34%
Red Hat Software	RHT	\$23.80	\$22.25	\$22.24	▼ 0.04%
Sun Microsystems	JAVA	\$5.05	\$11.72	\$11.18	▼ 4.61%
Symantec	SYMC	\$19.44	\$20.21	\$19.37	▼ 4.16%

NOTE: This information is meant for reference only and should not be used as a basis for buy/sell decisions.

CoSoSys Protects Client Workstations

Secure It Easy Guards Against Data Theft & Virus Infection From Portable Storage Devices

by Robyn Weisman

VIPdesk was in a quandary. Because the company’s agents work from their home computers, it needed to be able to show its financial clients, such as MasterCard, that its security policies and technologies were even more secure than those at competing companies using traditional network architectures.

So VIPdesk (www.vipdesk.com) contacted three big security companies to see whether any of them could supply the right security to VIPdesk’s unique setup. All three said yes, they could, but when Dan Fontaine, vice president of technology at VIPdesk, met with the engineers at these companies, all of them admitted they were unable to implement the technology VIPdesk needed.

“When January [2008] was coming around, they said, ‘We can’t do this because workstations need to be part of the domain,’” says Fontaine. “Meanwhile, we had a definite deadline when we needed to make this happen.”

VIPdesk needed to find a provider that could meet its needs ASAP. Fortunately, Fontaine found CoSoSys’ Secure It Easy (www.cososys.com), which met VIPdesk’s needs and was inexpensive to boot.

A Need For VIP Security

VIPdesk offers clients both concierge and contact center solutions. When you call MasterCard concierge services to, say, book an itinerary and hotels for your trip to Europe, you are speaking to one of VIPdesk’s home-based agents. And during peak occasions, such as the Christmas shopping season, you may find yourself talking to one of VIPdesk’s agents when placing an order with your favorite catalog retailer.

VIPdesk’s environment is unique because the company does not supply workstations to its 700 or so agents. Because its agents use their own PCs, Fontaine says that VIPdesk cannot lock down these

machines through an Active Directory domain policy.

“Because these machines are not part of our domain, we cannot send out policy to block [portable] devices,” says Fontaine. “We’re taking services traditionally offered in a brick-and-mortar call center, where a manager can walk the floor and look over

assured that these devices can be locked down from VIPdesk’s agents’ PCs so that these clients’ customers do not have to worry whether the wrong person is accessing their credit card and Social Security numbers.

Great Service, Easy Deployment

Although CoSoSys’ Secure It Easy was the only endpoint solution that fit VIPdesk’s needs, Fontaine says he may well have picked it over another solution because of CoSoSys’ superior customer service. “They were great to work with. They made themselves available even before we made the purchase,” Fontaine says. “They made themselves available for meetings, provided us with a trial of the client when we were experimenting with it, and if we had any questions, they responded quickly.”

In addition to its ability to lock down client computers, Secure It Easy integrated easily and smoothly with VIPdesk’s NAC-based system. VIPdesk paid CoSoSys a one-time license fee for several client licenses along with a minimal annual service fee.

According to Fontaine, VIPdesk succeeded in implementing CoSoSys’ solution from start to finish on all its agents’ computers within a week. Installing Secure It Easy was extremely simple for end users. “Essentially they just had to click and hit ‘next’ a couple of times, and they were done,” says Fontaine, adding that the installation came with two pages of big screen shots that explained to VIPdesk’s agents what they were about to experience and what to do if they encountered any problems.

Once installed, the Secure It Easy client runs as a service in the background, Fontaine explains. While it’s running, agents cannot copy information to any type of portable or CD-write drive. VIPdesk’s NAC infrastructure checks to make sure Secure It Easy is running, and if it is not running, the end user gets an error message that tells him to install the software so that it is running or to call VIPdesk’s technical support to find out what is preventing Secure It Easy from doing its job. In any event, the agent cannot work for VIPdesk’s customers

an employee’s shoulder to monitor what someone is doing within our CRM or whether [he or she] is looking at too many credit card records too quickly.”

Fontaine says that VIPdesk’s security is just as secure, if not more so, than traditional brick-and-mortar call centers. VIPdesk has a lot of technical infrastructure in place and conducts at least five onsite security audits each year. The company uses firewalls, intrusion prevention systems, and other monitoring capabilities to keep track of its agents’ activity. It uses NAC (Network Access Control) devices that look at its agents’ PCs to make sure they have the latest antivirus definitions, firewall software, and application updates, among other things, present before they are allowed to log on to the company’s VPN.

However, this security setup lacks an endpoint security solution that can keep USB thumb drives, CD-write drives, iPods, smartphones, and other portable devices from connecting to these client PCs and accessing sensitive data. Fontaine says VIPdesk’s financial services clients needed to be


unless Secure It Easy is working on his computer.

No Regrets Whatsoever

“I don’t have any regrets with going with Secure It Easy at all,” Fontaine says. “It has met all of our needs, as well as the requirements of our financial services clients.”

Fontaine adds that in the near future VIPdesk’s other clients will most likely adopt the same sort of security requirements its financial clients presently need. “We are constantly trying to improve our information security and make the delivery or automation of it that much more efficient,” he says.

When asked what he would like to see in future iterations of Secure It Easy or CoSoSys products in general, Fontaine says he would like to be able to do screen recording on remote environments for the purposes of quality control or to track employees’ actions. “That’s very difficult to implement in a home-based environment because of bandwidth,” says Fontaine. “You have to send all that information off of a person’s high-speed Internet connection to a location to be stored, whereas if you’re on a LAN (local-area network), it’s easy to accomplish because you don’t have to worry about Internet speed or bandwidth.”

Because such a product would reside on a person’s workstation, it could capture those recordings and potentially upload at a more convenient time, such as when the end user isn’t working. Moreover, it could possibly be used as a full-fledged NAC because it could restrict access to certain network resources if the end user fails to implement a VPN or firewall and also scan at intervals to make sure these security agents are still active. Fontaine says that if CoSoSys offers such a solution, he could see replacing his NAC-based security setup with this solution. 

CoSoSys Secure It Easy

Endpoint PC security system protects client workstations from viruses, data theft, data leakages, and other threats that portable devices with internal memory can pose

“CoSoSys was actually the one company that was able to offer the solution that would work in our environment, where our end users’ workstations are not part of our domain, and [Secure It Easy] was really reasonably priced, so even our CFO was happy about that,” says Dan Fontaine, vice president of technology at VIPdesk (www.vipdesk.com).

(866) 846-6779
www.cososys.com

Email Archiving With Data Integrity

ArcMail’s Defender U3160 Improves Productivity & Reduces Strain On IT Resources

EMAIL HAS BECOME the *de facto* means of communicating in an office setting. Archiving all that data is important, and managing it effectively can help a company improve productivity and reduce the strain on IT resources. It’s crucial to ensure data integrity so archived data can’t be altered.

ArcMail Technology addresses these needs with Defender U3160, a standalone appliance with 16TB of storage that provides comprehensive archive and data management. The appliance operates seamlessly in the background. Both administrators and end users can use a simple, Web-based



interface to search for and retrieve archived email data. ArcMail Defender U3160 can be used either in the office or remotely.

Admins have a variety of abilities with ArcMail Defender U3160, including being able to monitor system settings and produce reports to ensure that emails are being successfully archived. Once data has been archived, it’s protected by data integrity and encryption technology to ensure that data that has been backed up and subsequently restored can’t be altered.

ArcMail Defender U3160 is easy to install, use, and manage and captures all inbound, outbound, and internal email with

the mail server’s journaling function. Operating on the Linux platform, the appliance is compatible with Microsoft Exchange, Lotus Notes, Groupwise, and other mail servers with journaling functionality.

ArcMail Technology ArcMail Defender U3160

\$34,999

Provides email archiving with data integrity and encryption

(866) 417-6495

www.arcmailtech.com



Web Security For Every Size Of Enterprise

Aladdin's eSafe v6.2 Proxy Expands Security Options For The eSafe Family

INTERNET-RELATED SECURITY THREATS are nothing new, but they're as dangerous as ever. Checking for Internet threats in real time is a powerful way to combat malware of every kind. Aladdin Knowledge Systems' family of eSafe products is designed to address security issues on



multiple levels. The latest addition to the arsenal is eSafe v6.2 Proxy, a Web-security application for both in-line and proxy implementation.

By virtue of its implementation options, eSafe supports virtually any network environment. Protection occurs in real time and is designed to help companies protect data, improve productivity, and enable compliance. eSafe can be deployed as a native proxy that integrates Microsoft ISA or as an in-line bridge/router, forwarding proxy, or ICAP proxy.

eSafe v6.2 Proxy is designed to inspect all HTTP, HTTPS, and FTP over HTTP traffic thoroughly to protect the network from viruses, spyware, spam, Trojans, and more. Aladdin designed eSafe v6.2 Proxy to provide complete protection, high performance, and intelligent and thorough inspection.

The eSafe family is a flexible security package that can be installed in enterprise environments in a variety of different modes. It's designed to work transparently, checking Web activity at the gateway to avoid impacting network performance.

Aladdin Knowledge Systems eSafe v6.2 Proxy

Starts at \$3,500
Flexible Web-security application for any enterprise network
(800) 677-1587
www.aladdin.com



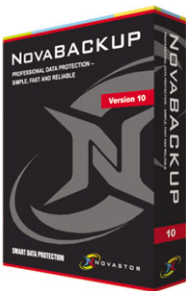
STORAGE

JUNE 20, 2008

Customize Backup & Recovery

NovaStor's NovaBACKUP 10 Provides Local & Online Data Protection

DATA PROTECTION IS NOT ONLY CRITICAL for computer users, it's essential for the defense of PCs and servers. To secure user data, an SME must set a backup system in place. NovaStor's NovaBACKUP 10, a comprehensive data protection and disaster recovery solution, supports both local backup and online storage. In the event of an onsite disaster, NovaBACKUP 10 takes a snapshot of the entire



system, which enables fast restoration of a local or network source. Online recovery can copy or mirror information to FTP, Internet storage accounts, or corporate servers. In terms of flexibility, NovaBACKUP 10 enables users to restore all files or select specific files for backup. Users can also customize backup times and, with the flexible scheduler, choose the right routine for automatic backups so they can track when their data is processed. Other convenient features include Smart Select backup for photos, music, documents, or emails and plug-and-play support for devices such as DVDs, CDs, Blu-ray discs, USB devices, and tapes.

NovaBACKUP 10 comes in three versions: Professional, Server, and Business Essentials. NovaBACKUP 10 Professional offers basic backup and recovery for single workstations running Win2000/XP/Vista and features 2GB of free online storage for one year. NovaBACKUP 10 Server is designed for Windows 2000/2003 Server and includes 5GB of free online storage. NovaBACKUP 10 Business Essentials offers 10GB free online storage for a year along with priority support. This version is suitable for SMEs running a single SQL and/or Microsoft Exchange Server.

NovaStor NovaBACKUP 10

Data protection and disaster recovery software that users can customize
Professional \$49.95; Server \$199.95; Business Essentials \$499
(805) 579-6700
www.novastor.com



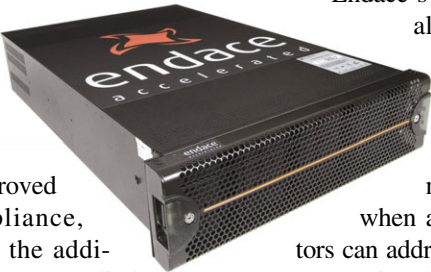
SECURITY

JUNE 13, 2008

Core-To-Edge Detection

Endace's NinjaProbe Adds Snort IDS Support & Data Mining Capabilities

MONITORING THE security of a network requires network administrators to make sense of a constant flow of information from a variety of fronts. Malicious threats and anomalies of all kinds must be recognized and dealt with handily, and administrators must rely on their equipment to help them keep the network safe. All of this puts more pressure on NIDS (network intrusion detection systems) to do their job well.



Endace has improved on its NIDS appliance, NinjaProbe, with the addition of 10G Snort IDS, Applied Watch Command Center Agent, and data mining capabilities. NinjaProbe is powered by Endace's DAG (Data Acquisition and Generation) technology. The new features are open-source and facilitate high-speed packet capture, intrusion detection, and

analysis. They are designed to be easily deployable, powerful, and secure. Endace's acquisition of Applied Watch allows NinjaProbe to integrate well with Snort IDS' management tools. NinjaProbe captures all incoming traffic to disk, from the edge of the network to the core, so that when a rule is triggered, administrators can address the problem and mine data concerning the event. And because the platform can operate on segments up to 10Gbps with continuous indexed rotary storage, analysts can collect and study data both before and after an alert. The appliance's features can be managed remotely, including for Snort rule defini-

tion, download, and alerting, as well as data mining and platform configuration. Other features include traffic filtering and Netflow record generation, which facilitate data capture, performance management, traffic monitoring, and electronic surveillance to meet the full range of requirements.

Endace NinjaProbe

\$28,825
Provides core-to-edge detection and data mining for the network
(703) 964-3740
www.endace.com



STORAGE

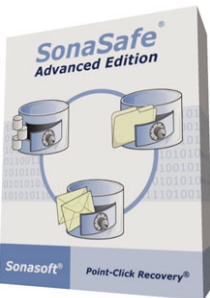
JUNE 13, 2008

Backup, Recovery & Disaster Protection

Sonasoftware's SonaSafe Suite Beefs Up The Defense

PROTECTING DATA IS ONE of the most important things a company can do. Sonasoftware's newest version of its SonaSafe Suite for Microsoft Exchange, SQL, and Windows Servers improves upon its ability to facilitate data backup and recovery. SonaSafe Suite is designed for high availability by continuously updating data that was retrieved from the primary system

to the redundant, standby servers. The redundant servers themselves are designed to immediately take over for the primary system in the event of a disaster. SonaSafe Suite supports SQL 7.0, 2000, and 2005; Exchange 2000, 2003, and 2007; and Windows NT/2000/2003/XP. Back-



up and recovery options are also available via a bootable CD and can be performed on systems such as VMware and Microsoft Virtual Server. The suite is controlled through a Web-based interface. New features of the suite include dynamic mailbox backup, which makes larger amounts of mailbox storage possible on an Exchange server. One complete backup is made, so only incremental backups need to be performed in the future, thus eliminating costs. Data retrieval is possible with a few mouse clicks. Other new features include customizable ports and enhanced replication and recovery capabilities. Customers can now define and open ports for backup and restore functions, which is more secure than doing so on more commonly used ports. File level backup and recovery options are also increased.

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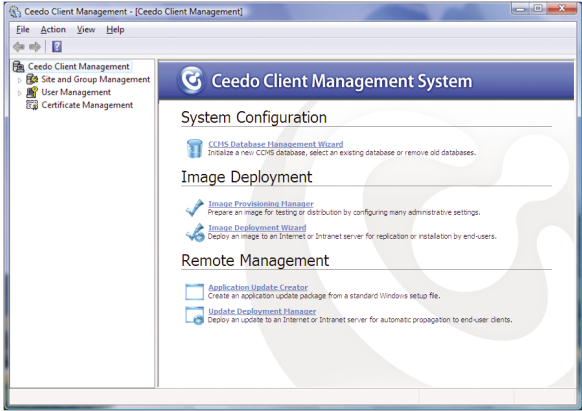
Sonasoftware SonaSafe Suite

SonaSafe Application: \$1,995
SQL/Exchange/File Systems Agent: \$995
Provides backup and restore functionality for Microsoft SQL, Exchange, and Windows servers
(408) 927-6200
www.sonasoftware.com



Virtualize Your Applications

Ceedo Enterprise Lets You Access Applications From Anywhere



WHEN TRAVELING PROFESSIONALS are out on the road, it's important to not only have access to important files, but to critical applications, as well. With Ceedo Enterprise, road warriors can have access to both files and applications while leaving their laptops at home. Ceedo Enterprise is an application virtualization tool that can store entire work environments on a USB hard drive or flash drive for light travel.

Ceedo Enterprise separates the applications, application settings, and data from a computer's operating system but still allows the applications to communicate with the operating system. With these features, Ceedo Enterprise offers application portability, remote management, business continuity, and disaster recovery. In

addition, Ceedo Enterprise offers users the ability to customize their workspace through their own applications and plug-ins. This process does not require administrator involvement, the workspace is separate from the computer, and the installation of applications onto a Ceedo workspace can be done without packaging.

With Ceedo Enterprise, IT managers can control enterprise applications, install new software, and update user files right away from a remote location. Ceedo can be installed on a USB device in order for installed applications to become portable for use on any PC running Windows 2000/XP/Vista, or it can be deployed in real time to a PC from a network or from the Web.


Ceedo Enterprise

\$89 per seat (perpetual license)

Creates a virtual work environment that offers application portability, remote management, business continuity, and disaster recovery

+972-7-322-322-00

www.ceedo.com



Wireless Presentations

ATEN's KE8220 Eliminates Cables, Upgrades Existing Projectors & Takes Your Meetings To The Next Level

CABLE-SWAPPING AND UPLOADING presentation data located on remote computers are serious drags in any professional meeting. With the KE8220 Virtual VNC Console, ATEN revolutionizes the meeting room with a tool that not only allows multiple local presenters to wirelessly transmit their presentation data from their notebooks to a projector or display, but enables remote users to push their data in real time via LAN, wired or wireless, to the ATEN KE8220.

This wireless presentation system from ATEN's ALTUSEN product line upgrades existing projectors and generates a cable-free conference environment for multiple presentations. The KE8220 also allows remote access of PowerPoint presentations, images, and other applications for real-time display on a projector, monitor, or other display device with standard VGA connectors. With the Wireless-G USB Adapter, the KE8220 transmits data over a secure high-speed 802.11b/g wireless connection at speeds of up to 54Mbps with 64-, 128-, and 256-bit WEP encryption.

Users can download AltusenVNC software from the KE8220's embedded Web server, allowing anyone in the meeting to switch focus between computers seamlessly with a mouse-click.



This plug-and-play device is compatible with Windows 2000/XP/2003/Vista. The KE8220 system features:


- 802.11 b/g support for wireless presentation without cable swapping
- Display computer's screen on projector via network
- Real-time display of PowerPoint presentations, images, and applications
- Seamlessly switch focus between computers with a single mouse-click
- Supports high-quality display resolutions up to 1,280 x 1,024 at 60Hz
- Ad-Hoc mode with DHCP server support enables a direct wireless connection between the KE8220 and a laptop
- Automatic discovery and multilingual UI support simplifies process
- Supports static and automatic (DHCP) network configuration

ATEN KE8220 Virtual VNC Console

Presentations unleashed: enables wireless presentations without cable swapping

(888) 999-2836 or (732) 356-1703

www.aten-usa.com



Customized Power & Monitoring

Geist Goes Where Others Fear To Tread

Product Definition Form

Customer Name: _____ Phone: _____ E-mail: _____
Quantity Required: _____ Target Price: _____ Project Timeline: _____
First Unit Required by Date: _____ Comparable Competitive Unit Brand/Model #: _____

ELECTRICAL CONFIGURATION

Power Input			
Quantity*	Plug Type	Input AMPS	Input VOLTS
5-10P	15	125	
5-10P	15	125	
5-20P	20	125	
5-20P	20	125	
6-20P	20	250	
6-20P	20	250	
14-20P	20	125/250	
121-20P	20 x 3+	120/208 V/115	
15-30P	30	125	
15-30P	30	250	
14-30P	30	125/250	
115-30P	30 x 3+	250/240	
121-30P	30 x 3+	120/208 V/115	
IEC C-10 Inlet	20/10*	125 or 250	
IEC P-10 & Sleeve	20/10*	250/250*	
IEC P-10 & Sleeve	2 Pin: 3 Ww	20	250 3+
IEC P-10 & Sleeve	3 Pin: 4 Ww	30/30*	250/250*
IEC P-10 & Sleeve	2 Pin: 3 Ww	30	250 3+
IEC P-10 & Sleeve	3 Pin: 4 Ww	60/60*	250/250*
IEC P-10 & Sleeve	2 Pin: 3 Ww	60	250 3+
IEC P-10 & Sleeve	3 Pin: 4 Ww	80	250 3+
Cord Length			

Power Output

Quantity	Receptacle Type	AMPS	VOLTS
5-10R Duplex	15	125	
5-10R Individual	15	125	
5-10R Duplex	15	125	
5-20R Duplex	20	125	
5-20R Individual	20	125	
5-20R	20	125	
5-20R Duplex	20	250	
5-20R	20	250	
15-30R	30	125	
15-30R	30	250	
IEC C-13	15/10*	125 or 250	
IEC C-19	20/10*	125 or 250	
Other - Please Specify			

PHYSICAL CONFIGURATION

Dimensional Limits	Mounting Orientation
Length	Horizontal
Width	Vertical
Height	

HARDWARE OPTIONS

Quantity*
8" Wire Tails with removable plate
Flexible Conduit
Terminal Block

*Ratings for CE products
*Quantity = 1 if not available

Geist Manufacturing * 800-432-3219 * Fax 402-474-4389
www.geistmfg.com * www.geistmfg.com

Geist Manufacturing's Product Definition Form lets you customize product configurations and other options.

WHEN YOU THINK OF customized power and monitoring products, what comes to mind? Difficulty in product definition? Numerous engineering delays? Long lead times? Outrageous prices? Don't throw in the towel. Geist makes customization convenient.

Customization is part of our standard way of doing business. Geist has built itself around the ability to serve customers, even when they want something out of the ordinary. Whether you need custom chassis dimensions, particular software programming, specific wiring configurations, or uncommon components, it's not a problem. Where other companies turn away from customization, a substantial portion of Geist's business is custom orders.

Unlimited Options

Geist offers more than 1,000 model numbers made up of numerous product configurations and options. The Product Wizard at www.geistmfg.com can help identify the model that meets your spec. However, if a standard unit does not fit your application, don't settle.

Geist specializes in 15- to 120-amp PDUs, including single-phase, three-phase, IEC, and NEMA configurations. Your plug type choices include straight-blade, twist-lock, California style, or a pin-and-sleeve connector. You may also design your device to incorporate environmental, current, circuit and outlet level monitoring with local and/or remote display options. From multiple circuits and cord length to receptacle type and quantity, Geist puts your needs first.

The Customization Process

Calls to Geist are answered by a live person. Without delay, you are directed to your personal customer service representative, and the person you speak to today is the same person that you will work with every time you call. Your CSR will walk you through our Product Definition Form and submit your configuration for quote. Typically you will receive your custom project quote from Geist before other competitors can even agree on the product definition.

Design for success. Geist's in-house engineering department includes a group of mechanical, electrical, board layout, and software specialists whose sole

responsibility is to design custom products. From concept to prototype delivery, this team reduces your custom development time from months to weeks.

Custom is just part of the regular flow. Whether the project is standard or custom, all Geist products are built to order and made in the United States. Versatile work centers and highly trained personnel give manufacturing the ability to react immediately to any customization project, without affecting the regular production routine. Geist utilizes lean manufacturing to evolve from a mind set of mass production to one of mass customization.

Quality assured. Geist uses a one-piece flow and in-process quality inspection to guarantee that every unit is examined for functionality and visual defects prior to packaging. Whether building a standard or custom product, this superior level of quality and reliability comes with every unit we make.

Geist operates a state-of-the-art testing lab, supervised by an in-house conformance engineer. By having this facility within Geist, we are able to quickly ensure regulatory compliance for all of our products, including customized ones.

Continuous improvement. In the third quarter of 2008, Geist will launch its metal works division. This new operation includes fabricating and powder coating equipment, enabling Geist to streamline chassis production as an internal function. The new metal works capabilities will further enhance Geist's rapid production response by minimizing restrictions due to suppliers' schedules.


Geist has established a 60-year reputation for providing personalized customer service, hassle-free product design, and fast-turn production for power and monitoring solutions.

Geist Power Management Products

Specializes in 15- to 120-amp PDUs and other power-related products that can be customized to fit your specific needs

(800) 432-3219

www.geistmfg.com



NX-9000 Sets The Standard For Scalability

Industry's First Gigabit WAN Acceleration Appliance



SILVER PEAK SYSTEMS' NX-9000 is the newest member of the company's NX family of appliances. The NX-9000 is the industry's first Gigabit WAN acceleration product, raising the bar for WAN performance and scale.

The NX-9000 supports up to 4Gbps of bidirectional LAN-side traffic and 1Gbps of bidirectional WAN-side traffic, with 8TB of local data store available for WAN deduplication. The newest Silver Peak appliance delivers up to 10 times the real-time throughput of competitive offerings.

The NX-9000 also includes two 10Gbps interfaces and four 1Gbps interfaces with EtherChannel bonding for physical connectivity between Silver Peak appliances and network elements, which is required for deployment in data center environments. As more hosts turn to multi-Gbps interfaces, the NX-9000 has the capacity required to support the corresponding growth in data volumes.

The NX-9000 is ideal for high-volume data environments and supports more

than 256,000 simultaneous TCP flows. It optimizes all enterprise applications, including TCP traffic, real-time UDP traffic, latency sensitive traffic, and applications with dynamic data formats. Plus, NX appliances ensure that data is always secure, at rest and across the WAN.

The NX-9000 utilizes the following advanced optimization technologies to improve WAN bandwidth efficiency and accelerate application performance:

- Network Memory: Works on latency sensitive traffic and both TCP and non-TCP applications.
- Network Acceleration: Employs techniques that minimize latency caused by TCP and other chatty protocols.
- Network Integrity: Silver Peak is the only WAN optimization vendor to address lost and out-of-order packets in real time using adaptive FEC (Forward Error Correction) and POC (Packet Order Correction).

Silver Peak NX-9000

Starts at \$259,995
Gigabit WAN acceleration product
(888) 598-7325
www.silver-peak.com



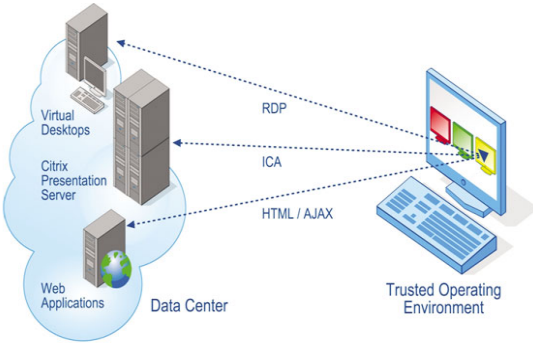
Alleviate Endpoint Virtualization Stress

Neocleus' Trusted Edge Provides Simple, Secure Endpoint Solution

AS PROFESSIONALS BECOME more mobile, there is an increased need to keep these employees securely in touch with company resources. But maintaining a virtual connection that is both secure and reliable can be difficult—especially because organizations cannot control the security of an endpoint operated by a customer or employee.

For this reason, Neocleus has launched Trusted Edge, which is designed to provide organizations with a program that connects customers and employees to corporate resources from anywhere in the world, regardless of the state of security. Trusted Edge will address issues that arise when managing and safely deploying applications, data, and services.

Trusted Edge implements a new Type 1, bare-metal hypervisor and a separate virtual trusted environment outside of Windows provided by new security plan and IT management framework. When putting Trusted Edge into operation, desktops will not need to be rebuilt, decreasing end-user downtime and costs. Trusted Edge can run other Windows-based applications upon customer demand and supports RDP, Citrix ICA, and Web interfaces. Authentication and configuration controls offer an easily managed virtual



endpoint environment, creating a win-win situation for both IT personnel and users.

Trusted Edge not only provides customers and employees with the flexibility of accessing company resources from anywhere, it also has continuously operating real-time remote confirmation of virtualized environment reliability.

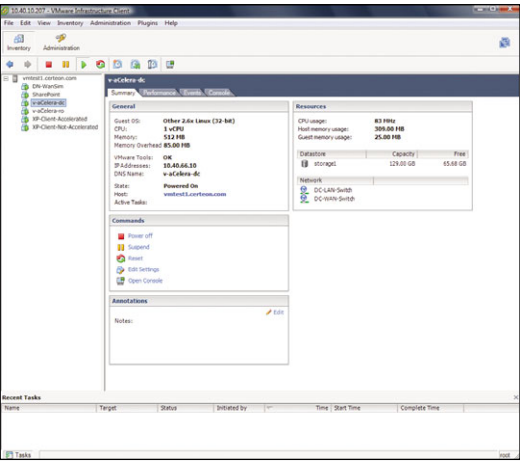
Neocleus Trusted Edge

Base-level user licenses start at \$150 per user
Helps IT personnel, customers, and employees manage issues with endpoint virtualization
(201) 309-3042
www.neocleus.com



Accelerate Applications

Certeon's aCelera Boosts Virtual Efficiency



With the ability to run on any standard x86 system, aCelera Virtual Appliance software can share resources with the rest of your computing infrastructure.

WITH CERTEON'S ACELERA Virtual Appliance software, you can apply the advantages of virtualization to application acceleration without a reduction in application response time. The aCelera Virtual Appliance software delivers up to a 95% reduction in application response time for applications being accessed across the WAN. The software runs on standard x86 hardware in one or more virtual machines, so companies can mix and match application acceleration solutions for virtualized and nonvirtualized environments.

aCelera Virtual Appliances accelerate all network traffic and are optimized to accelerate remote access to specific applications, including Microsoft Office,

Microsoft Office SharePoint Server, EMC Documentum eRoom, and UGS Solid Edge. The Certeon aCelera software provides centralized provisioning and is integrated with VMware Virtual Center to enable IT managers to allocate and manage app performance resources wherever needed. This flexibility helps avoid the need for specialized devices at each end of a WAN connection. By adding more virtual machines, IT staff can increase the acceleration capacity as much as needed for specific times or days when application traffic is heavy.

IT managers can reduce their overhead costs by downloading and deploying the aCelera Virtual Appliance software for remote users to help reduce the amount of dedicated hardware in data centers and remote offices.

Certeon aCelera Virtual Appliance Software

Starts at \$2,495
Allows you to accelerate application access without dedicated hardware
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- Accepts Micro Atx Mother Boards
- Accepts 2 Internal Hard Drives
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- IEC 60320 C20 Power Inlet
- 20A/15A 90-135/180-250VAC
- 20Amp Emi/Rfi Filter
- Performance From 10Khz to 30 MHz

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PH: (559)651-2222

sales@tri-mag.com
http://www.tri-mag.com
FAX: (559)651-0188

Services To The Rescue

A Look Inside The Services Available For Today’s Data Centers

by Christian Perry

• • •

THERE EXISTS A DILEMMA of mounting proportions in data centers at many small to midsized enterprises. As companies realize the benefits of blending business and IT objectives to further the overall success of the business itself, IT managers are being perpetually pulled away from data center tasks that they shouldn’t ignore. Budget restraints at many companies prevent the hiring of additional personnel to solve this problem, but service providers can offer an effective alternative.

The following services can not only remove data center responsibilities from the shoulders of IT managers, but they can even introduce expertise and value into the overall data center equation.

Data Services

The IT staffs in many SMEs can capably handle a wide range of technological demands, but as businesses grow, the demands can put a hefty strain on existing personnel. This strain becomes particularly evident around data-related tasks such as electronic data storage, data backup, records management, document imaging, and document destruction.

“Data-related service providers offer an effective alternative,” says Nicholas Kottyan, CEO of DataChambers (www.datachambers.com). “For example, outsourcing routine data backups can ensure that business-critical information is protected on a regular basis, even if a team member is sick, on vacation, or decides to leave the company. You can free up valuable staff time for more important assignments while maintaining continuity in your operations.”

Using outside data services can also provide integral support to a company’s growth strategy, Kottyan says, because they provide it with a flexible method for managing peaks and valleys in the demand for IT support until managers can establish a firm trend line and determine whether it makes good business sense to add more employees.

“Many SMBs outsource a portion of their operations in order to complement their own internal IT team. You might need extra arms and legs, 24/7 coverage, or a way to redeploy your internal resources to



more critical tasks. You might want to store backups at a remote site, establish hot desks for disaster recovery, devote dedicated resources to hotline support, or find a more cost-effective way to maintain desktop computers,” Kottyan says. “Service providers can tailor support plans to meet your precise requirements and do so for a predictable monthly fee.”

Power Services

As the focus on green IT continues to grow, data center managers are placing a heavier emphasis on ensuring their power systems are correctly configured. For SMEs, this can entail tasks as simple as power testing to more advanced undertakings, such as CFD (computational fluid dynamics) modeling and full data center power assessments. This is weighty territory that’s often best left to power experts who can provide these services on a one-time or even regular basis.

“Regular power testing helps you identify potential problems before they impact the bottom line,” says Omar McKee, manager of service solutions for Emerson Network Power’s Liebert Service (www.liebert.com). “Too often, data center managers aren’t aware of an issue with the power system until the power goes out, and that’s an expensive alarm system. . . . As equipment ages and the IT network evolves, new problems will present themselves. Continued testing—even when it seems unnecessary—enables you to be prepared when those problems arise.”

Power services are available for data centers of any size and can be as simple as the installation and continued maintenance of a UPS or the maintenance, monitoring, and replacement of batteries. More advanced services

provide availability assessment, which can entail safety compliance, electrical infrastructure examination, power quality testing, and fuse and breaker examination. Power service providers also often handle cooling assessments and air-conditioning maintenance.

Planning, Design & Quality Assurance

Although SMEs might have the technical personnel to run an IT organization, planning and designing data centers and other IT infrastructure brings a set of challenges that often require outside expertise. Increasingly, the data center is tied into the business, and according to Dennis Lasley, vice president of Accent Global System

Architects (www.accentglobal-llc.com), the business is an important and often overlooked stakeholder.

“Often, in-house experts, although they may be fully capable, are tied to organizational norms that may preclude a ‘fresh’ review of the business requirements,” Lasley says. “Service providers specializing in closing the business-to-technology gap can usually provide an unbiased and unfiltered review of business operations and the supporting system infrastructure.”

Planning and design services can help with large or small projects and address a wide range of issues, including site selection, feasibility studies, architectural design, raised floor design, availability and risk assessments, and others. Many companies also offer quality assurance services, which help to ensure new and existing designs are running at efficient, effective levels.

Cleaning, Maintenance & Repairs

Most of the hype surrounding data centers entails the technology that resides within them, but without proper physical support for that technology, a data center can encounter big problems in a hurry. SMEs that are already strapped for bodies to run the data centers can’t afford specialized personnel to clean, maintain, and repair the equipment and infrastructure.

Go to Page 11

More Services

- **Cloud computing.** Encompassing SaaS (software as a service), utility computing, and Web and platform services, providers offering cloud computing services can place the burden of resource-heavy applications and other resources outside of SME walls.
- **Disaster recovery.** These services provide complete restoration of company data and facilities in the event of an emergency.
- **Training.** Data center training services provide in-house or remote training on every available technology and discipline, including networking, programming, security, management, and others.
- **Strategy consulting.** Even the most forward-thinking data center managers can benefit from an outside perspective, and plenty of companies offer strategic consulting that can help define and refine plans.
- **Migration assistance.** Moving a data center? Potential nightmare scenarios lurk close behind, but a service provider can help ensure that all equipment and data make the move safely and effectively.

Budget restraints may prevent the hiring of additional personnel, but service providers can offer an effective alternative.

PHYSICAL INFRASTRUCTURE

JUNE 13, 2008

Industrial PoE Splitter

Advantech’s EKI-2701PSI Provides Power To Difficult Situations

PoE (POWER OVER ETHERNET; also known as IEEE 802.3af) has proven itself in commercial and enterprise applications over the past several years. Using the unused wires in a 10/100BaseT cable, or by overlaying power on the data connections, PoE supplies 15.4W of power at 48VDC.

PoE is useful for powering network devices and equipment where it is inconvenient, expensive, or infeasible to supply

power separately. Connected between a standard Ethernet device and a PoE-powered connection, the Advantech EKI-2701PSI operates as a splitter, separating the PoE connection into a standard RJ45 Ethernet port and a removable screw terminal block capable of supplying nearly 13W at 24VDC.



Packaged in a thin DIN-rail mount chassis, the Advantech EKI-2701PSI is ideal where panel space is limited. It supports both standard 10/100BaseT and Gigabit 1000BaseT connections. It is also ruggedized for demanding industrial applications, with 4,000 VDC Ethernet ESD protection, power line surge (EFT) protection of 3,000 VDC, power isolation, and output power short circuit protection. For maximum uptime in unattended and remote locations, the EKI-2701PSI features an extended operating temperature range of -40 to 75° C.

The EKI-2701PSI splitter is an ideal means to gain the benefits of PoE with standard Ethernet devices in harsh industrial environments. For applications with two or more devices requiring a PoE power source, the EKI-2525P 5-port industrial Ethernet switch is a great match.

Advantech EKI-2701PSI

Separates the PoE connection into a standard Ethernet port and a removable screw terminal block
(800) 205-7940

www.advantech.com



Services: The Right Option?

Continued from Page 1

For example, given the amount of capacity needed every month, a manager can track the growth of data storage needs and project that into a few years ahead.

If it appears that more backup will be needed, in-house management will have to include potential equipment costs, software application upgrades, consultant fees for project management if necessary, and possibly more labor as the time needed to do backup increases. Managers will even need to add power and cooling costs to the mix because the amount of each that is available affects how much equipment can be added to the data center.

Sometimes a company may find that it's more cost-effective to do its own services in-house in the short term but potentially more money-saving to use third-party services as the business expands.

An important consideration, then, is to lock in the rates for at least a few years so that if costs increase for the provider, they won't be passed on to the SME. Every six months, the SME can go back over the numbers and make sure that using the service still makes sense and deserves to be in the budget.

Management Levels

Another top factor in determining if services are the right option for an SME is to gauge the level of oversight and management that the relationship will require. Some services, such as specialized data

center cleaning, involve some negotiations and instructions at the initial phase of the agreement and not much interaction once the work gets underway.

But in general, most tasks will require some level of management, and the service provider should state that expectation upfront. It's also important to make sure that the SME isn't the only one paying attention to projects or tasks.

The service provider should be keeping in touch, making suggestions about tweaks to the arrangements if necessary, and being as hands-on as possible, notes Patrick Zelten, vice president of professional services at Forsythe Technology, a technology consulting firm. "The consultant or third-party service provider is there to look at what issues need to be addressed and [be] on the lookout for whether something isn't working," he says.

If talking to an outsourcer feels as if it's taking more time than handling the tasks in-house, it may not be a good arrangement. Chatting with a company's references can help to get a good perspective on how much time a firm's other clients take to manage the arrangement and also who might be most effective at an outsourcer in terms of the work.

Relationship Know-How

Unlike contracting with a delivery service to pick up packages or a cleaning crew to vacuum the offices in the evening, the relationship between the IT department and a third-party service provider should involve numerous discussions, and not just about the work at hand.

One major reason that some companies choose an outsourcer is because that firm has an extensive industry network, and

It's important to make sure the SME isn't the only one paying attention to projects or tasks.

representatives there can provide more than just the contracted services.

For example, some vendors will be able to talk about the technology used in network maintenance or bandwidth allocation but also discuss larger trends that could

Question Sheet

In determining whether a third-party service is appropriate for your SME, these are the types of questions you should ask before signing on the dotted line:

- What is the cost difference between hiring another IT employee with relevant experience vs. outsourcing the work?
- How will the service scale up as the company grows?
- What type of access to networks and equipment is required for the best service? Is everyone in the data center comfortable with that access level?

affect the SME down the road, notes Russell Morgan, founder and current president of ITSPA (Information Technology Solution Providers Alliance). "Consultants realize that IT is more closely linked to business goals and strategy at this point, and they should be able to address areas like a company's mission if they want to be most effective," he says.

When shopping around for vendors, Morgan suggests SMEs talk to current customers about their service expertise but also about what other levels of value the provider is supplying. Some may even go outside the realm of their contracts for clients that they like—for instance, referring candidates for an open position.

"It's like any other kind of relationship," Morgan says. "You want a level of comfort and familiarity and even some chemistry in how you work together. So take your time and shop around until you find someone that clicks with your mission and your operations." ■

Doing More With Less

Continued from Page 1

trends in regulation and compliance are also playing a larger role. Resources are also an issue: According to Christophe Guittenit, founder and CTO of Seanodes (www.seanodes.com), today's primary challenge for administrators is dealing with flat budgets as storage needs continue to increase.

Reclaim Unused Space

One way to get more out of existing storage assets is to ensure those assets are fully utilized. In terms of storage, the internal disks in application servers are usually unused, says Guittenit, who adds, "This requires the addition of new storage hardware frequently, both network dedicated to storage and disk arrays." One way to do this is by using technologies that allow administrators to reclaim the large untapped storage capacity embedded in application servers to cover storage needs. Typically, this type of technology works by using software to convert internal disks and

direct-attached storage into shared storage that can be used to store more data.

Seanodes' Guittenit says this approach reclaims bought and unused storage capacity in application servers and turns them into a highly efficient, reliable, virtual networked storage device. In essence, this approach enables the use of heretofore untapped sources of storage in the enterprise: It's all about making use of what's already readily available within enterprise server internal disks and DAS.

The SME Challenge

One of the main challenges for SMEs is a lack of time and attention, due to the fact that SMEs lack the IT resources to scale up their business for maximum operational efficiency and better performance, says Patrick Eitenbichler, director of marketing for HP's StorageWorks division (www.hp.com). This, he adds, is necessary as the need to store more data becomes essential in order to stay competitive. So, even though most companies are now managing

more than 30 times the amount of data they had less than 10 years ago, this means more data to manage and more complex technologies to learn.

"Ongoing administration and maintenance of the existing storage infrastructure can consume the lion's share of most organizations' IT budgets and time," says Eitenbichler. And, he adds, with budgets remaining flat and data requirements increasing, the need for better storage resource management has become a business priority.

Eitenbichler points to five major methods administrators can use to reduce the costs of managing their existing storage assets and protecting their data: consolidation, centralized backup, deduplication, thin provisioning, and data life cycle management (see the "Managing & Protecting Data Cost-Effectively" sidebar for more information).

Saving Space

Diligent Technologies' Grave says two technologies at the top of the list of approaches that help users do more with their existing storage infrastructures are deduplication and virtualization. Deduplication technologies find and eliminate redundant data within a storage repository, adds Grave, so the primary value proposition of deduplication is to maximize storage utilization.

In fact, says Carter George, vice president of products with Ocarina Networks (www.ocarinatech.com), data reduction techniques such as compression, deduplication, and more advanced storage optimization can allow an administrator to store as much as 10 times more data on the storage that they already have. For example, adds George, administrators can use caching and the use of memory for file-based storage, while solid-state disks are poised to emerge as the fastest drives in a storage system.

In terms of utilization, adds George, the keys are better utilization of free space and better utilization of the space needed for data. "The key technology for free space management is thin provisioning," he adds.

This technology, says George, virtualizes the view of disk space to users and allows free space to be allocated and managed more efficiently. He adds that storage optimization is the key technology for utilization of the space needed for data storage. By using this technology, users can shrink existing files by as much as 90%, thus enabling the storage of up to 10 times more data on disks already owned by the enterprise.

Improving Performance

Beyond utilization, all administrators also want to improve the performance of their storage infrastructures. Jon Affeld, senior director of product marketing at BlueArc (www.bluearc.com), points to a number of techniques that can be used to enhance performance, including striping, tiering, caching, and upgrading.

Striping data across LUN groups and disk arrays allows administrators to do more work in parallel and bring more resources to bear for specific tasks, adds Affeld. An example, he says, is a database striped across several hundred disk drives all acting as a logical unit.

Tiering means creating different tiers of disk media and storage arrays optimized to different tasks, he adds. The use of caching technology to preload commonly used data and files can deliver speedier access. Finally, he emphasizes, upgrading to the latest firmware or technology possible for existing equipment can also improve performance.

"Look for products that are modular, easily scalable, and allow upgrading with data in place and minimal disruption to service," says Affeld.

At the end of the day, there are a number of technologies that can enable administrators to get more from what they already have in place. In a sense, the challenge for administrators has moved beyond figuring out which primary storage solutions to choose to determining what technologies are required to effectively manage and enhance the performance and utilization of what's already in place. ■

Managing & Protecting Data Cost-Effectively

Patrick Eitenbichler, director of marketing for HP's StorageWorks division (www.hp.com), points to a list of five methods SME customers should focus on to reduce the costs of managing and protecting data:

- 1. Consolidation.** Moving data onto centralized storage systems can help administrators avoid the fragmented capacity that leads to extra maintenance work, low disk utilization, and huge backup headaches.

- 2. Centralized backup.** SMEs should look at disk-to-disk-to-tape backup solutions that initially store data on disk drives and eventually migrate it to tape for long-term data retention. Ensuring successful backups on a nightly basis is "mission-critical," says Eitenbichler.
- 3. Deduplication.** Using deduplication allows administrators to drastically reduce the amount of data stored on disk-based backup systems at data reduction ratios of 20:1 or even 40:1.

- 4. Thin provisioning.** This technique eliminates wasted capacity by automatically sizing storage capacity needed by application requirements.
- 5. Data life cycle management.** It sounds simple, but keeping an inventory of storage devices onsite, available capacity, and growth trends can allow administrators to delay additional purchases for several months.

Finding A Service Provider

Declare Freedom From Weak Vendors

by Curt Harler

FINDING A RELIABLE service provider for data center maintenance, backup, security, and similar services is tricky business. But it does not take a magic touch to choose well—only the discipline to do the research to find out who offers what your small to mid-sized enterprise needs.

Selecting a top-flight data center provider is no different from selecting any other supply chain provider or vendor. The same best practices should always be considered, says Eric Nelson, director of busi-

ness development at Alteritech (www.alteritech.com). He recommends a formal RFP (request for proposal) or RFQ (request for quotation), if there is time, to give the

process what it will require to do it properly (see the “Handling The RFP/RFQ Process” sidebar for more information). At the top of Nelson’s list is a series of ranked selection criteria. He says these should be extrapolated from the business drivers. “Are you trying to save money? Improve service? Reallocate internal resources?” he asks. “Your evaluation should be empirically driven by the reasons you are considering engaging one in the first place.”

Kevin Prince, chief security officer for Perimeter eSecurity (www.perimeterusa.com), says, “Understand that not all service providers are equal. Each has a varying degree of expertise and capabilities.”

The Evaluation Process

When evaluating service providers, Prince says the first thing SMEs should look at when starting their evaluation process is the provider’s history. “Many companies have just decided in the last year or so to become a service provider. Many of these will fail and cause major problems for their customers when they do,” he says, adding that SMEs should look for providers that have been in the space for many years.



can find out about what you don’t want me to know about you.” While the vendor might not want to provide those names, it is worth talking to ex-customers. They may have simply outgrown the vendor, or there could be a red flag that you should be aware of before signing on the dotted line.

Ask questions that show how potential providers differ from competitors. Check such issues as uptime statistics, SLA response times, client technical support survey statistics, the provider’s internal disaster recovery plan, and network resiliency. “Ask for a SAS 70 and other auditing documents performed against the service provider,” Prince says. Third-party testing, such as a Cybertrust (www.cybertrust.com) vulnerability and penetration testing, is a good idea, he notes.

Due Diligence Shortcut

Doing due diligence is vital, but there might be one shortcut SMEs can consider: Let the government help.

Today, regulators require a host of compliances from companies. See how many compliance-based products a potential vendor

offers. “This is a good measure of a service provider,” Prince says, noting that many solid providers got their starts from the banking industry with the focus on GLBA (Gramm-Leach-Bliley Act) regulations. GLBA forced providers to fall in line with the specific compliance needs of their customers.

By the same token, when a managed service provider gets a certain market penetration, it must undergo FFIEC (Federal Financial Institutions Examination Council) oversight for regulatory compliance itself. This ensures the service provider’s products, services, policies, and procedures meet best practices. “So selecting a service provider that is under FFIEC oversight is a good practice,” Prince says.

“Find a service provider you can grow with,” Prince says. Many providers offer a couple or half a dozen services. “Few service providers offer a complete solution for their customers. A wide breadth of products and services will be a huge advantage down the road.”

On the other hand, seek service providers that can custom-fit solutions for your needs. Prince notes, “A flexible service provider is one you will be able to stay with for a long time.” P

It does not take a magic touch to choose a reliable service provider—only the discipline to do the research to find out who offers what your SME needs.

ness development at Alteritech (www.alteritech.com). He recommends a formal RFP (request for proposal) or RFQ (request for quotation), if there is time, to give the

Handling The RFP/RFQ Process

If you have the time, an RFQ/RFP (request for quote/request for proposal) process can make life easier when finding a provider.

“Consider utilizing strategic partners like RampRate or Whitlock Consulting to help you select the right data center partner; these companies’ primary business is advising on strategic partner selections,” says Eric Nelson, director of business development at Alteritech (www.alteritech.com).

“There are business situations that may not allow the use of an RFP/RFQ process due to time constraints. In this case, the business must rely on the interview and reference process.”

However, don’t let your favorite service provider, or a consultant affiliated with a service provider, write the RFP. “I can’t tell you how many times I see RFP/RFQs that have been custom written for a specific service provider,” says Kevin

Prince, chief security officer for Perimeter eSecurity (www.perimeterusa.com). “You need an unbiased look at the market and providers to get a true sense of who would be your best fit.”

Prince takes a more jaundiced view of RFPs and RFQs than does Nelson. “Sometimes when these are sent out, the right people at various service providers don’t get them, and therefore you don’t get responses from parties

that could have been a good partner,” he says.

Service providers often look at RFPs from an effort-to-reward perspective. If they are expected to answer a custom 20-page RFP for a few hundred dollars a month, they just won’t do it, Prince says. “RFPs should be concise and well-written to get the most out of each question and create an understanding of the different capabilities of each service provider.”

Services To The Rescue

Continued from Page 9

“General maintenance tasks can be performed internally, but tasks that are specific to a particular system, such as the power or HVAC systems, may be best left to personnel certified in maintaining those systems,” notes Kris Domich, principal consultant of data center and storage solutions at Dimension Data (www.dimensiondata.com). “Some of the most innocent attempts to clean sensitive components can result in damage, injury, or a voided warranty.”

Service providers not only have personnel specifically trained to carefully clean expensive, sensitive equipment and the areas around it, but they also have

equipment built for the job, including anti-static tools and chemicals. Cleaning and maintenance services are available for all areas of the data center, including raised floors and ceilings. Repair services are also available for all types of data center equipment, but not all providers service all equipment types. Depending on the type and scope of the repair, companies may opt to solicit bids for certain repair jobs.

Security

Advances in technology can bring a bounty of benefits to businesses and their bottom lines, but they also inevitably introduce more security threats that can be

difficult to monitor and prevent. Chris Richter, vice president and general manager of security services at SAVVIS (www.savvis.net), explains that SMEs often find that properly managing their security involves making a significant investment in capital and personnel.

“Among other security best practices, separation of duties requires separate job functions for the management of IT security and other IT tasks. For example, it is not considered a best practice for a database administrator to also be responsible for management of firewall rules,” Richter

says. “Outsourcing security functions to a managed security services provider can help SMBs achieve separation-of-duty practices and growth without adding personal costs.”

Managed security service providers can address all of an SME’s security needs or just tackle particular areas, such as firewall management, intrusion prevention and detection, log management, vulnerability assessment, wireless security, and others. Some providers also offer physical security services, which can be useful for companies looking to protect resources around the clock. P

Managed security service providers can address all of an SME’s security needs or just tackle particular areas.

The Idea Of Hosting The Data Center

By Using A Hosted Service, Enterprises Can Focus On Core Business

by Sandra Kay Miller
• • •

DATA CENTERS have become an integral part of the modern enterprise; however, rapidly evolving technologies have also made data centers increasingly difficult to sustain. Nicholas Carr, former executive editor of the *Harvard Business Review* and business technology writer and strategist, believes it is time for companies to change the way they invest in IT infrastructure. “You want to operate as efficiently as possible, but no longer can you innovate your way through IT to a competitive advantage,” he says.

To meet this new paradigm, companies are moving to hosted models, thus making the data center a service instead of an asset. “What we’re seeing is that it makes a lot of sense to begin to centralize and consolidate IT assets and provide those basic IT capabilities as services that many different companies can share. What you get is much more efficient use of your assets rather than every company hav[ing] to go out and buy and maintain their own data center.” Carr believes that with the network infrastructure in place today, the capacity to deliver sophisticated IT services from a centralized host is here. “We’re seeing companies move in that direction,” he says.

IDC listed the worldwide IT leasing and financing market, which includes data center hosting, as exceeding \$70 billion worldwide in 2006 and expects that figure to

organizations to shift to managed data center hosting facilities in order to focus on their core business instead of trying to maintain the cutting-edge technologies today’s enterprise requires.

The benefits of using data center hosting services are not limited to smaller companies, though. For example, the federal government has increasingly been turning to privately owned data centers just outside the Washington, D.C., area for the hosting of national secrets, as well as the day-to-day business of running the country. Catering to government agencies, these new data centers include the latest technological and physical security measures; however, many larger financial institutions are finding these state-of-the-art data centers equally appealing for their own infrastructure outsourcing.

Why Do It?

According to Ted Chamberlin, research director at Gartner, there are myriad reasons for enterprises to use a hosted data center. “No two

enterprises have the same drivers, but speaking to Gartner clients over the last few years, I’ve pulled out a few trends leading them to make that decision.”

The first trend Chamberlin has identified is the need for companies to concentrate on what’s core to their business. “Companies are being forced from the top down to be revenue generators. When that happens, there are often lots of new business initiatives and applications that can’t be internally supported, so they turn to external hosting,” he notes.

The second reason for choosing a hosted data center is the need for disaster recovery and business continuity. “Organizations want to ensure that if a disaster happens within their customer premise, they’ll have a second site that they can fail over to keep some, if not all, of the business up and running,” says Chamberlin.

For organizations that have already taken the leap into the hosted data center, Chamberlin has received positive feedback. He attributes this to the overall maturity of the hosting industry. “There is not much new in the [hosting] market that is really driving huge variations on providers,” he says. “There are some new technologies, such as utility computing, where some providers have competencies and others don’t, but in general, it’s a pretty mature offering. We don’t see too many providers offering poor service.”

Universal Solution

Regardless of the size or nature of your business, Carr says that first organizations must take a very skeptical look at their data center operations and determine whether it is delivering a competitive advantage. Additionally, they should see if competitors are turning to or planning to move to hosted data centers.

“I think that you should look for how you can capitalize on commoditization and on the utility model by moving the assets out of your own control and over to utility suppliers,” Carr says. “It’s time to change your thoughts that IT shouldn’t be an asset that you own but a service that you can buy for a monthly fee.”

While many small to mid-sized enterprises are willing to entertain a purely hosted model due to necessity, larger companies with existing data center infrastructure that are unsure of how a hosted model will work for them can test the waters by experimenting with hosting in areas such as data center expansion, consolidation, storage, and disaster recovery. □

Top Five Considerations

Gartner analyst Ted Chamberlin lists what organizations looking to host their data centers need to investigate before making the switch.

- **Service level agreements.** Have a firm agreement in writing as to what level of services will be delivered and the consequences for not doing so.
- **Financial viability.** Examine the long-term stability of the hosting company.
- **Flexible, but not too flexible.** Watch out for hosting companies that agree to do whatever it takes to get your business.
- **Pricing.** Does the hosted model fit your budget?
- **Compliance and redundancy.** Be certain that the hosting company fulfills the requirements to meet all business needs while maintaining uptime.

The ever-increasing investment in complex IT infrastructure has led many organizations to shift to managed data center hosting facilities in order to focus on their core business.

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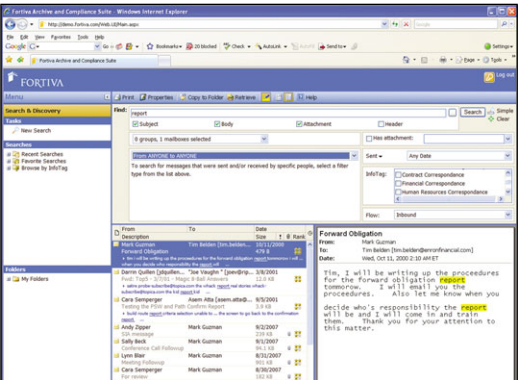
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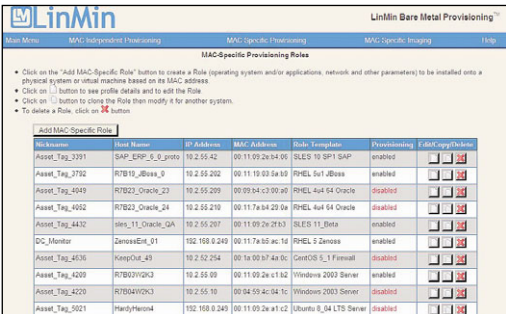


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SERVICES

JUNE 6, 2008

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copper wiring, and aluminum. These materials are then recycled and reused for other products. Even the components left over are not dumped into landfills or incinerators. Instead, a combination of physical and mechanical demanufacturing methods are used to split up harmful materials from recyclable parts.

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STORAGE

JUNE 6, 2008

Agentless Information Recovery Management

Televaulting 8.0 Provides A Next-Generation Platform For Information Recovery

IT PERSONNEL certainly have their hands full with the escalating amount of information stored on networks, server consolidation, compliance, security, and disaster recovery issues always looming. Legacy backup and recovery technologies don't always have what it takes to ensure organizations can map IT processes, reduce IT costs, retain data long-term, and maintain business continuity. So, organizations are turning to agentless information recovery management platforms, such as Televaulting 8.0 from Asigra. In addition to providing agentless information recovery management, Televaulting 8.0 offers backup and recovery of VMware ESXi, and its intelligent archiving feature provides policy-based backup life cycle management and long-term data retention, while cutting the costs of hardware storage. The multidirectional data center replication supplants storage-storage replication and supports one-to-one, many-to-one, and many-to-many replications. Organizations will have room to grow in both capacity and performance with DS-Client grid-based scalability. Also, Televaulting 8.0 supports SAP, SharePoint, Oracle, Microsoft SQL, DB2, Exchange, Lotus Notes, GroupWise, and others.

With Televaulting 8.0, IT outsourcing and organizations get integrated information recovery management from the data center to the remote office, along with potential solutions for performance loss, manual deployment, burdensome software and information management, limited cross-platform interoperability, and security problems. The nonintrusive platform behaves as a data recovery services "blade" in the outsourcer's, providing capital and operational cost reductions and allowing for the removal of software agents that have damaging impacts. As the only 64-bit agentless information recovery management platform, Televaulting 8.0 offers a centralized approach to agent-based patchwork solutions.

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A Secure Virtual Data Container



QuickVault's JumpVault Gives Mobile Devices Powerful Security Features

MOBILE DEVICES are becoming more ubiquitous every day. However, what they gain in convenience they can lose in security. It's common to misplace a mobile device. In either loss or theft, data should be both protected from possible breaches and also able to be disabled remotely.

QuickVault's JumpVault turns nearly any mobile device into a secure, virtual container of information. Size doesn't matter; JumpVault can secure a device with any size internal flash memory. As an added security bonus, the virtual container can be disabled remotely so that the stored

data is effectively locked down from any potential breach. Essentially, JumpVault is designed to extend the controlled and secure IT environment to the mobile user.

JumpVault virtual containers are password-protected with built-in 256-bit encryption, remote authentication of devices and users, and meta data logging to keep track of any data movement. When configuring the virtual container, users can include or exclude any files or folders. Supported operating systems include WinXP and Vista, Mac OSes, and Linux. Users can also schedule daily, weekly, or monthly backups and set backup rules. Setup is designed for ease of use and includes drag-and-drop capabilities. JumpVault also automatically compresses files.

QuickVault's servers facilitate a number of functions of JumpVault, including meta data logging and remote data transfer. JumpVault is preconfigured to authenticate with QuickVault's servers, so connection is both simple and secure.

QuickVault JumpVault

Basic Edition: \$34.99; Professional Edition: \$129.99;
12-month subscription to Remote Security: \$60
Provides multilayered security for mobile devices
(404) 735-4443 (volume sales only)
www.jumpvault.com



NETWORKING & VPN

JUNE 6, 2008

Keeping Track Of Names, Not Numbers

eTelemetry's Locate 4.1 Gives Administrators Name-Based IP Address Tracking Capabilities

IT CAN BE DIFFICULT to track users on a network when their only identifying mark is an IP address. Locate 4.1, eTelemetry's network appliance for IP mapping, makes it significantly easier by attaching people's names to IP addresses, MAC addresses, and switch ports.



The appliance makes it easier and faster to locate devices, users, and connections and helps administrators react more proactively to network threats.

Keeping track of ports and addresses by name enables network forensic tracking to account for employee network activity. With configurable reports, administrators can detect rogue Wi-Fi networks so they can react in a timely manner.

Locate lets administrators acquire email, instant messaging, and switch port information from unauthorized users and quickly identify and shut them down. An additional feature named Instant Assist can be leveraged by help desk staff to locate a user's network by name and, with a one-click connection, implement Remote Desktop and Remote Assist.

With Locate 4.1, visibility is possible even without a centralized network, and security and identity management features

will still benefit a system without a network operating system.

Locate 4.1 works with any wired or wireless network, features plug-and-play installation, and works from a mirrored port to avoid impacting network performance.

Locate 4.1

\$7,495
Provides easy name-based tracking and management of IP addresses on the network
(888) 266-6513
www.etelemetry.com



CLIENTS

MAY 30, 2008

Server Power, Laptop Portability

Eurocom's D90xC Phantom-X Mobile Server Provides Powerful Computing On The Go

THE NEED FOR POWERFUL, server-caliber computing in settings other than a typical office is a large and crucial one. Eurocom addresses this market with its D90xC Phantom-X Mobile Server, a powerful PC in a laptop form factor that weighs just 12 pounds.

The D90xC Phantom-X is a 64-bit system that operates on Intel quad-core Xeon processors running at 2.83GHz with 1,333MHz frontside bus and 12MB of L2 cache. Speed is



further facilitated by up to 8GB of DDR2-800 memory.

Although measuring 11.9 x 15.8 x 2.05 inches (HxWxD), the D90xC Phantom-X supports up to three SATA-300 hard drives for up to 1.5TB of storage. Users can also choose between RAID 0, RAID 1, or RAID 5 configurations.

Other features include a 17-inch display,

a one-hour backup battery in the event of a power failure, and a rewriteable Blu-ray drive. The keyboard is a full 102-key desktop-type board with a separate numeric keypad. Wireless options include built-in 802.11a/g/n WLAN, as well as Bluetooth.

The D90xC Phantom-X also features a number of I/O ports, including a Gigabit Ethernet LAN with an optional second Gigabit Ethernet port via a PC Express slot. The computer also features four USB

2.0 ports, FireWire, serial and parallel ports, and CRT and DVI-D ports to power up to two additional external displays.

The D90xC Servers are customizable, and the hard drives, memory, optical drives, processors, and graphics are upgradeable.

Eurocom D90xC Phantom-X Mobile Server

\$2,454
Server-caliber computing power in a laptop form factor
(877) EUROCOM
www.eurocom.com



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Easy Network Monitoring

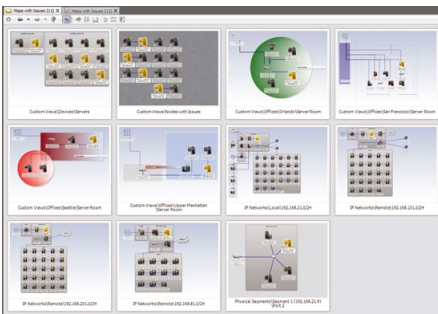
Manage Network Events With AdRem Software's NetCrunch 5

NETWORK MONITORING can be a complicated set of processes. Simple, clear-cut solutions are hard to find, which is why AdRem Software developed NetCrunch 5, a network monitoring solution for SMEs.

NetCrunch 5 boasts the inclusive monitoring of Windows, Linux, NetWare, and SNMP devices. NetCrunch 5 differentiates itself not only by providing such a wide array of monitoring coverage, but also by doing so in an agentless manner.

NetCrunch 5's new features include predefined monitoring policies for major operating systems and applications such as Exchange, SQL Server, Oracle, Insight Manager, IBM Director, and others. NetCrunch 5 is able to monitor an assortment of systems and devices, as it also contains RPC, WMI, SSH, and SNMP monitors and more than 65 built-in network service monitors. A major feature that makes NetCrunch 5 so easy to use is its intuitive user interface. NetCrunch 5 will automatically perform network discovery, a scan of your system that will identify and classify nodes and present them in a graphical map form, making it easier to see where problems occur and making solutions faster and more efficient.

AdRem Software's NetCrunch 5 promises to reduce the cost of IT operations and thus improve company revenue. IT professionals will appreciate lower maintenance requirements and shorter deployment time.



NetCrunch 5 presents data in graphical form, making problems easy to identify and faster to correct.

NetCrunch 5 is designed to run on Windows XP SP2, Vista SP1 (excluding Home), and Windows Server 2003 x32 or x64 and comes in two editions: Premium and Premium XE. The Premium XE edition is intended for a dedicated server, as it is optimized for larger, intensely monitored networks. Both editions include a one-year professional service agreement with annual upgrade protection.

AdRem NetCrunch 5

Premium: starting at \$2,595

Premium XE: starting at \$7,495

An inclusive network monitoring system that makes solving problems easy with predefined monitoring policies and a graphical interface

(212) 319-4114

www.adremsoft.com



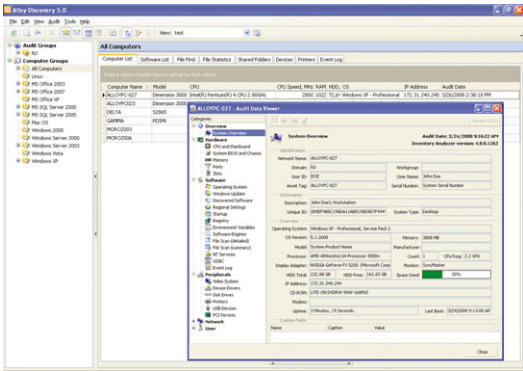
Audit Your Computer Inventory

Alloy Discovery Provides All The Necessary Tools

THE INVENTORY of computer hardware and software can be easily overlooked. Alloy Discovery from Alloy Software is a network inventory solution to help SMEs gain tight control over their entire computer inventory through a combination of audit methods that include an agentless on-demand audit, login-script, scheduled task, and the portable audit for non-networked computers.

Alloy Discovery can configure, deploy, and run inventory audits, as well as help analyze the audit results. For flexible deployment, the software offers multiple configuration options, including single- and multi-domain networks; workgroup networks; remote (WAN) sites and isolated networks; and standalone and non-networked computers. Alloy Discovery lets you audit computers on an ongoing basis.

To help maintain an up-to-date inventory, Alloy Discovery includes an automated archive process called "Pruning." This process allows you to define a schedule for the removal of obsolete audit snapshots and determine the file storage path for archived records. The system will then automatically remove obsolete audit snapshots from the Inventory Repository.



With flexible data filtering and grouping, Alloy Discovery lets you sift through data using specific criteria.

The audit results can help you plan for OS migrations and hardware and software updates, and you can integrate the data with other interfacing applications.

Alloy Software Alloy Discovery

100 computer node license: \$795, with additional computer nodes \$3 each; special pricing for IT service providers

Audit the hardware and software on your computer network

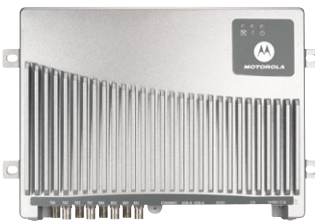
(973) 661-9700

www.alloy-software.com



Fixed RFID Reader

Motorola XR450 Reduces Costs & Increases Inventory Visibility



THE XR450 fixed RFID reader is designed to help enterprises achieve a competitive advantage by increasing inventory visibility and process efficiency, resulting in reduced costs and improved profitability.

The reader enables customers to select between using four mono-static ports that each utilize a single antenna to transmit and receive or four bi-static ports that utilize dual antennas. In this way, the XR450 RFID reader provides greater flexibility to adapt the reader to the intended application and perform deployments at the highest possible performance in the most challenging RF environments. Superior read rates and enhanced read ranges easily accommodate multiple RFID applications—from the manufacturing floor to warehouse loading docks to the retail store front. Advanced data collection features enable the rapid delivery of refined real-time information.

The ability to incorporate alarms, light sensors, and more from other automated asset equipment enables a wide range of business processes—from dynamic reconfiguration of build-to-order assembly lines to real-time alerts that can

prevent the placement of inventory in the wrong location.

The standards-based SOA enables seamless integration and interoperability with existing IT infrastructure—and maximum application flexibility. Robust RFID functionality includes support for standard back-end platforms, direct application hosting, and the ability to interact with additional asset automation equipment such as forklifts and conveyor belts.

Support for leading business systems includes IBM's Data Capture and Delivery Solution certified to work with IBM Premises Server 6.1 and 6.0, Microsoft RFID Biz Talk Server 2006 R2 and SAP, as well as leading development tools, including .NET 2.0 and off-the-shelf applications.

The ability to control and maintain all XR Series Readers from a single central location dramatically simplifies and reduces the costs associated with day-to-day management.

Motorola XR450

Starts at \$2,195

RFID Reader is easy to use and can serve as a control center for all XR Series Readers

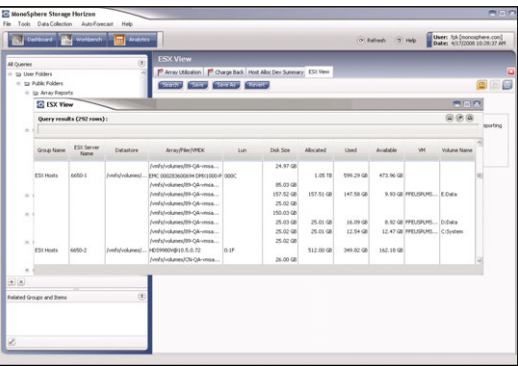
(800) 722-6234

www.motorola.com



Managing Storage

Storage Horizon 3.7 Provides Analysis For Better Management



MonoSphere Storage Horizon 3.7 offers detailed views for more efficient storage management.

WITH THE VARIETY of different storage environments used by SMEs, it can be difficult and time-consuming to manage all of a company's data storage. MonoSphere has upgraded its storage management software to meet this need.

One of the newest upgrades to Storage Horizon 3.7 is increased support for VMware server virtualization with visualization of storage abstraction. The software analyzes and displays results for storage usage details and relationships between servers, file systems, virtual disks, guest OSes, and guest OS file systems/raw devices, so managers can determine when additional storage needs arise.

Other enhancements include automated chargeback analysis, advanced analytical capabilities, and analysis of database storage consumption. With automated chargeback analysis, logical and physical IT

assets can be grouped with a variety of different parameters and automatically analyzed to show storage usage.

Advanced analytical capabilities provide reports to help eliminate wasted or unused storage assets. Reports analyze storage consumption by volume group, free pool report, LUN-to-disk analysis, and dark storage breakdown. Other new analytical functions include automated scheduling and distribution of analytical reports.

Enhanced database storage consumption analysis provides feedback that enables database users to drill down to see details concerning table spaces and data files, as well as view log applications, data vs. log information, and public folder and mailbox rollups. Storage Horizon 3.7 supports Oracle, MS SQL, and Sybase databases and MS Exchange.

MonoSphere Storage Horizon 3.7

Starts at \$50,000

Provides detailed analysis for simplifying and optimizing enterprise storage capacity management

(800) 925-3040

www.monosphere.com



ProductReleases

CLIENTS

■ **AMCC** recently introduced its PowerPC 460GTx embedded processor, which combines a PowerPC superscalar CPU core with a high-bandwidth memory and I/O subsystem to enable users to run processor-intensive embedded applications in networking, wireless infrastructure, and general purpose control. The PowerPC 460GTx features four Gigabit Ethernet ports, an encryption/decryption engine, support for TCP/IP assist, and 801.p- and q-compatible QoS. Available clock frequencies range from 800MHz to 1.4GHz. The PowerPC 460GTx will be available in samples and evaluation kits in the fourth quarter of 2008.

■ **AMD** launched its floating point FireStream 9250 stream processor, which is a GP-GPU (general-purpose computing on graphics processing unit) card designed to accelerate critical algorithms in high-performance computing, such as financial analysis and seismic processing. The single-slot AMD FireStream 9250 breaks the one teraflop barrier for single precision performance. It uses a PCI interface, fits into a 1U server rack, and runs on less than 150 watts. The FireStream 9250 and the supporting software development kit will be available in Q3 of this year starting at \$999.

■ **Microscan** has announced what it calls the most flexible barcode-reading product for data-tracking applications. The Quadrus EZ FLEX C-mount imager combines Microscan's Quadrus decoding technology with connectivity to any standard C-mount lens and lighting solution. The combination

lets users create specific imager configurations for various data-tracking requirements, such as reading codes at extreme distances, while also letting users adapt to future needs. Microscan offers buyers prepackaged lens and lighting accessory kits that include a lens, spacer, and external light aimed at meeting application needs. The EZ FLEX also includes an EZ button for activating user-definable features.

■ **NextComputing's** NextDimension computers now have RAM capacity up to 24GB. The increased capacity is available on both AMD- and Intel-based computers. The memory upgrade to the portable computers is designed to decrease bottlenecks and maximize efficiency for compute-intensive applications. NextDimension computers are designed as a mobile platform capable of processing ultra-high-end graphics; running large, complex data sets; and multimedia applications. Systems equipped with the memory upgrade include the NextDimension Pro and Pro HD, as well as the NextDimension Evo and Evo HD. Features of the systems include up to 3TB of storage, up to four PCI-X/PCI-E slots, and a 17-inch screen.

■ **Sun** announced the latest version of its MySQL Cluster Carrier Grade Edition, which is a high-availability open-source database designed for carrier-grade telecom environments and Service Delivery Platforms. MySQL Cluster 6.3 lets service and equipment providers deploy large, highly available database applications across a wide geography. Features of MySQL Cluster 6.3 include integrated disk-based data support, geographical replication, and online schema management. MySQL

Cluster 6.3 supports Solaris, RHEL and SUSE Linux, and Mac OS X.

■ **Transcend** has released retail-packaged DDR3-1066 and DDR3-1333 204-pin DIMMs available in 1GB and 2GB capacities, respectively. Both modules use Fly-by architecture, which provides more efficient direct communication between the controller and each DRAM chip. The architecture also features dynamic On-DIMM Termination, which helps minimize signal reflections at higher speeds. The modules are made of 128Mx8 DDR3 DRAM chips that use Fine-Pitch Ball Grid Array packages with extra contacts for better thermal dissipation, electrical efficiency, and more reliable performance at higher clock frequencies.

MESSAGING & TELEPHONY

■ **Atempo** announced ADAM 2.0 (Atempo Digital Archive for Messaging 2.0), an email and instant-messaging archiving software for medium-sized and large businesses; it monitors and addresses data growth, eDiscovery, and regulatory compliance. ADAM 2.0 integrates easily with Microsoft Exchange, Lotus Notes, and SMTP while enabling companies to migrate critical email data from primary storage onto inexpensive storage media. This allows companies to provide an unlimited mailbox size to users and lets them search easily and quickly for specific emails, attachments, and other messaging files. ADAM 2.0 also contains an audit control and tracking, as well as retention policy management.

■ **Dialogic** announced enhancements to its IP Media Server, allowing service providers to expand their customer bases and reduce

network management expenses. These enhancements include support for integrated T.38 FoIP (Fax over IP), providing service providers with feature-rich voice messaging services for business or residential environments. Also, IP Media Server reduces the number of servers needed for subscriptions to help lower operational costs.

■ **IBM** announced Lotus Connections 2.0 and IBM Atlas for Lotus Connections. The newest version of IBM Lotus Connections helps people grow their professional network of contacts by adding colleagues. The home page streams feeds from various components of Lotus Connections and shows people what is happening within their network. Additional new features in Lotus Connections include widgets, people tagging, the ability to send or receive notifications, discussion forums, and integration with wiki providers Atlassian and Social Text. Atlas, a complementary offering to Lotus Connections, is a corporate social-networking visualization and analysis tool. Atlas has four Web 2.0-based components (My Net, Find, Reach, and Net) that help users spot important connections and relationships between various groups; the components also help users navigate their personal and corporate networks. The latest version includes several features that help people find the right experts while being able to quickly get a sense of activity within their network.

■ **LiveOffice** has announced its email archiving service designed for business and public organizations, LiveOffice Mail Archive. LiveOffice Mail Archive uses Web 2.0 and cloud computing technologies to deliver a Microsoft Outlook-like interface. LiveOffice

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MESSAGING & TELEPHONY

MAY 23, 2008

Regulating Electronic Communications

Archive Messages With Akonix's L7 Enterprise For The BlackBerry Enterprise Solution

AS PROFESSIONALS USE ELECTRONIC communications more and more, organizations must look for ways to supervise and archive this type of communication to prevent fines and legal sanctions.

For organizations looking to archive and monitor all forms of electronic communications, Akonix has introduced the

L7 Enterprise for the BlackBerry Enterprise Solution.

As a new addition to the Akonix UPM (Unified Policy Management) platform, L7 Enterprise for BlackBerry archives SMS, PIN-to-PIN text messaging, instant messaging, and email, making them searchable, retrievable, and auditable. They can

be sorted by employee name, group, or other directory attribute. L7 Enterprise can also offer security, policy management, and content filtering in addition to the archiving, with support for Microsoft Office Communicator Mobile, IBM Lotus Sametime Mobile, and MindAlign Mobile.

The L7 Enterprise provides thorough electronic message storage by integrating with LDAP directories, such as BlackBerry Enterprise Server, Microsoft Active Directory, and email archive platforms, such as EMC EmailXtender, HP Integrated Archive Platform, and Symantec Enterprise Vault. L7 Enterprise provides multiple real-time communications from a single console and the ability to apply and enforce policy through other L7 Enterprise modules

available for enterprise and public IM, online conferencing, server-based fax, and VoIP. It will be available as an add-on module for Akonix's A1000 and A6000 appliances or as a Windows Server software module.

Akonix L7 Enterprise for the BlackBerry Enterprise Solution

Starts around \$10 per BlackBerry

Helps organizations archive and regulate electronic communications

(619) 615-9415

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COVER STORY

Considering Preowned Equipment

A Data Center Doesn't Need The Newest Technology To Run With Efficiency & Productivity

By Elizabeth Millard

OLDER EQUIPMENT doesn't run as well as new, breaks easily, has a more limited lifespan, and requires far more time and effort for maintenance—these are just a few of the misconceptions that hardware resellers (even network hardware resellers) have from potential customers. "Even some of the manufacturers put out wrong information about preowned equipment," he says. "They're tainting their own product unnecessarily. Used equipment can last forever, and you can get it for up to 75% less than new—just because it's a second-generation product." "Certain technology products were built to last, and so they do," Sheldon adds, repeating a company motto he's backed up with a warranty. "Watch Out! Making sure that the warranties offered by pre-owned equipment dealers are adequate is a Go to Page 10

of reseller and recovery times. Restore days you can take seriously—this is a fact.

Helping Organizations Meet Compliance

Global DataGuard Offers Security Suite & Services

GLOBAL DATAGUARD is offering a full suite of enterprise-class products and services to assist organizations in protecting confidential healthcare data and electronic healthcare transactions. Within its Enterprise UTM portfolio, the Enterprise UTM++ solution and ASM (All-n-One Security Module) for Enterprise UTM integrate a range of enterprise-class security applications, including firewall, antivirus, and antispy; a VPN and Web content filter; IP reputation; IDS and IPS; network behavioral analysis and correlation; vulnerability scanning; a security event manager for global, network, and vendor threats and detected vulnerabilities; and network access control and monitoring.

Because all of the Enterprise UTM security applications are integrated at the architectural level, organizations realize better performance and service at a lower cost of ownership—up to 60% over standalone products. Application modules can be deployed as part of a complete security infrastructure or can be added incrementally, as business and compliance requirements evolve.

The All-n-One Security module for Enterprise UTM comes in four options (with firewall, VPN, antivirus, antispy, content filter, IP reputation, and IPS

included), with pricing starting at \$7,500 for an ASM core module. Custom configurations for the Enterprise UTM++ solution are designed and priced based on an organization's unique network requirements. Pricing for turnkey managed services starts as low as \$1,000 per month.

Global DataGuard's approach to supporting organizations in improving their compliance posture includes aspects such as behavioral analysis and correlation, security monitoring, vulnerability management, network access management/monitoring, assessment, training, project management, policies and procedures, and regulatory compliance audits. It provides a risk-based methodology, regular reviews of security controls, full life cycle device management, and audits and assessments for workforce and training policies.


Global DataGuard Enterprise Unified Threat Management Suite

Helps organizations protect healthcare information

Starts at \$7,500 for an ASM core module

(972) 980-1444

www.globaldataguard.com



Global DataGuard

Continued from Page 17

Mail Archive features simplified mailbox management, and it eliminates upfront hardware and maintenance costs. LiveOffice Mail Archive starts at \$8 per mailbox, per month.

.....

■ **Polycom** has unveiled three products: the Polycom TPX (Telepresence Experience) 306M, TPX 204M, and TPX 102M. These products are designed to provide an interactive visual communication and content collaboration experience to increase efficiency and productivity. The products support a variety of environments and feature fully operable, standards-based solutions for vertical applications, custom integrated rooms, and immersive telepresence applications. HD video displayed in lifelike proportions; clear, HD directional audio; and HD content-sharing capabilities create a same-room experience.

.....

■ **Spracht** has announced the second model in its product line, the Aura SoHo (\$249.99), which is a high-quality, full-duplex conference speaker phone that uses a Sound Clear DSP (Digital Signal Processing) chip for digital or analog systems. The phone is compatible with nearly all phone systems and is analog-ready. It includes multiline and digital PBX system compatibility when paired with an optional digital adapter. The phone's accessory bay plug-in options include a Bluetooth module, PBX for digital phone systems, and wireless connectivity. Additionally, the patented DSP technology provides echo and noise canceling for simultaneous two-way conversations without clipping. Other features include 5-watt output, automatic room acoustic profiling, three built-in microphones for 360-degree coverage in 20- x 20-foot rooms, and an optional external microphone for conference rooms. A ConferenceNow button allows for one-touch conference calling.

perform complete spectrum analysis and WiMAX packet demodulation. The YellowFin can sweep a 2 to 5.9GHz range to within +1.5dB accuracy. Additionally, it includes RSSI measurements for Cell-ID; segment, multipath analysis; and CINR (Carrier-to-Interference-plus-Noise-Ratios) on a preamble basis. The YellowFin also includes a 12-channel/satellite GPS receiver for geo-coded WiMAX site surveys and drive studies (using optional software).

.....

■ **CiRBA** has introduced Version 5.0 of the CiRBA virtualization and consolidation analysis software. This version allows organizations to frequently recognize opportunities to enhance performance, optimize VM placements, and reduce operational risk through constructing dynamic models of their virtual and physical infrastructure. Analyses are updated automatically through Version 5.0, which allows IT personnel better control over virtualized infrastructure. Business-critical systems can then be optimized and safe regardless of the continuous change and associated risks within virtualized data centers.

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■ New DPC (dense port concentrator) cards are available from **Juniper**. Built for the company's MX Series Ethernet Services Routers, the copper-based Tri-rate (10/100/1000) DPCs come in a power-efficient 20Gbps edition. The model numbers to look for are MX240, MX480, and MX960. Juniper will release a 1Gbps/10Gbps DPC in the second half of this year, as well.

.....

■ **Motorola** announced the availability of its new set of software products for designing, deploying, and managing outdoor wireless networks: the Motorola One Point Wireless Suite. The suite features Mesh-Planner, PTP LINKPlanner, and Motorola's Wireless Manager. The Wireless Manager provides IT managers and network operators enhanced visibility and control of Motorola's wireless broadband products. One Point Wireless offers planning software to take the guesswork out of designing networks for optimal coverage, capacity, and performance. Template-based configuration automates and speeds device configuration. The visually enhanced management software allows operators to see every node in the network and enables the efficient management of the entire system, including the access, backhaul, and mesh layers. Automated device monitoring facilitates performance verification and accelerated problem detection and resolution.

Motorola also announced that its Multi-Net Mobility solution can now be configured and managed remotely over a wireless data network and allows wireless devices to access a virtual private network and back-office applications from hotspots outside a vehicle. Motorola Multi-Net Mobility, based on the standard Mobile IP protocol, provides end-to-end data encryption for text, image, and video applications while operating across a variety of public and private networks. Multi-Net Mobility is a mobile VPN that maintains secure connectivity while users roam between wireless networks and optimizes network performance. With the addition of the remote configuration solution, Multi-Net Mobility now allows users to perform configuration updates remotely over the wireless data network to keep field personnel operating in the field instead of coming in for configuration updates. Multi-Net Mobility also offers a Wireless Vehicular Area Network, which creates a hotspot of coverage to allow users of portable wireless devices around a vehicle to connect to the Wide Area Network. Multi-Net Mobility meets U.S. government and public safety requirements with always-on authentication

Mobile Management

Control Wireless Networks With AirWave Wireless Management Suite 6



View and control all aspects of your wireless network with the AirWave Wireless Management Suite 6.

THE MOBILE workforce is growing as wireless technologies emerge and evolve. While this is great for the success of organizations, it can be a burden to IT support teams. But with a program that gives you visibility and transparency from a single console, such as the AirWave Wireless Management Suite 6, organizations can configure and manage an entire wireless network without additional costs.

AirWave Wireless Management Suite 6 from AirWave, a division of Aruba Networks, can help organizations migrate to 802.11n technology without discarding legacy infrastructure. The application also features a new Help Desk module that integrates with existing service desk solutions to provide IT with automated diagnostics and real-time monitoring for more efficient resolution of end-user issues.

Access points, routers, switches, authentication servers, and management servers are visible across wired and wireless infrastructures. This program provides comprehensive reports and centralized control of tens of thousands of wireless devices.

The AirWave Management platform provides real-time monitoring of wireless users and devices, as well as multivendor support. VisualRF software features direct CAD and bulk floor plan import to make console views more user-friendly, along with visual display of alerts and error conditions. For enhanced security, the platform includes RAPIDS rogue AP detection software. The AirWave Master Console offers scalable centralized configuration and detailed reports of the network's performance, groups, locations, and individual devices.


AirWave Management Suite 6

Starts at \$5,000

Helps organizations configure and control an entire wireless network from a single console

(866) 802-1121

airwave.com



■ **Aposite** has announced its WAN emulation appliance, Linktropy 4.0, which adds the Linktropy Recorder and Player to capture live network conditions and replay them through the Linktropy WAN emulator. Linktropy 4.0 is a Windows-based utility and can run for more than 24 hours to record the full range of conditions throughout the day. Linktropy 4.0 features an open file format, which offers users flexibility to view and edit the recorded link conditions or build sequences of delay and loss that can be imported and played by the Linktropy WAN emulator.

.....

■ **Avocent** introduced its newest model of Emerge, a high-definition multipoint extender transmitter, the MPX1500T, providing customers with wireless HD video distribution. This wireless approach to HD video minimizes wiring requirements and installation time. Emerge MPX can deploy professional video applications—content such as entertainment and advertising in retail outlets, theaters, restaurants, airports, and gas stations, as well as other venues. The MPX1500T transmitter has a universal media port that supports DVI, HDMI, or VGA signal formats, with the ability to convert VGA to DVI from computer sources. MPX works like a video splitter and is compact and flexible in its mounting options. The Avocent Emerge MPX1500T high-definition transmitter costs \$995.

.....

■ **Berkeley Varitronics Systems** has released the YellowFin, which uses a Samsung Q1 Ultra tablet UMPC as its interface. Berkeley calls the YellowFin the first-to-market calibrated, demodulating WiMAX analyzer. The YellowFin is a handheld WiMAX testing product that can

Product  Releases

and encryption, regardless of the network used.

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■ **Netcordia** released NetMRI 2.4, a collection of prepackaged reports in a new compliance portfolio. This provides “actionable insight” for network administrators through vital performance benchmarks that outline system changes, configuration blemishes, and compliance requirements, such as PCI, Sarbox, and HIPAA. It also gives a comprehensive health report card that detail items such as asset inventory, configuration policy, audit changes, ISO 27002, and default credentials.

.....
■ A server virtualization solution for Intel-powered Mac systems, the Parallels Server for Mac, is now available from **Parallels**. Parallels Server for Mac runs on systems including Xserve and Mac Pros and supports Leopard and Tiger servers. It supports Mac OS X10.5 Server as a guest operating system in a virtual machine. Mac server administrators can run multiple, isolated workloads on a single Leopard Server-powered XServe and use protected “sandboxes” to safely test software and hardware.

.....
■ **Replify** has announced the REPTOR Enterprise Manager, which allows companies to have complete visibility of application acceleration from data center to client. The Enterprise Manager makes managing large REPTOR Accelerator deployments with many clients and REPTOR WAN appliances easy. REPTOR Accelerator deployment is configured in the Manager using a simple Web interface. The software can reside in data centers or branch offices rather than on dedicated servers.

.....
■ **Softlayer** has unveiled enhancements for CDNLayer service that include bandwidth monitoring by CDN PoP (Point of Presence), origin pull of content, and FTP across the SoftLayer Private Network. PoP bandwidth reporting helps customers identify which PoP is used for downloads. The origin pull feature draws from Web server content at cache-controlled intervals; users must use Windows Media and Flash to stream from the origin Web server. FTP access allows customers to automate file transfers and deliver them through the private network.

.....
■ **Tektronix** has released OptiMon, automatic radio optimization based on Tektronix’s NSA (Network and Service Analyzer) platform. Operators who use 2G, 3G, and WiMAX networks can now pinpoint QoS problems through enhanced network mapping features. With accessibility to radio network parameters, users can maintain total visibility of Iub, Iu, and Iur traffic. OptiMon reports on Missing Neighbors, Pilot Pollutions, Ping-Pong handover, and Sleeping Cells. Additionally, users will benefit from TrendNavigate and DT-Synergy solutions, which recognize the root cause of network issues. TrendNavigate provides statistical analysis for improving UTRAN (UMTS Radio Access Network) performance. The DT-Synergy application connects drive test data with protocol test data.

.....
■ **Transition Networks** announced the SM24-100SFP-AH, a 24-port fiber access switch. The fiber switch is designed with OAM (operations, administration, and maintenance) capabilities to improve the management of delivering Carrier Ethernet and/or triple-play services. The SM24-100SFP-AH features a 1U form factor consisting of 24 100Base-X SFP ports, two 10/100/1000 RJ-45 ports, and two Gigabit combo ports. The 24 SFP ports accept industry-standard 100BASE-X optical

transceivers. The switch also includes Carrier Ethernet-specific software, QoS, and management features, which enable service providers to deliver secure services while checking end-to-end connectivity for customers. The SM24-100SFP-AH switch also features Private VLAN, DHCP Snooping, and IP Source Guard to help protect a subscriber’s traffic from affecting overall network performance.

PHYSICAL INFRASTRUCTURE

■ **Eaton** announced Power Xpert Architecture, an update to its PowerChain Management solution, which helps enterprises manage their power systems. Power Xpert enables organizations to integrate multivendor power and facilities infrastructure equipment into a unified system. Power Xpert features real-time power quality information at both system and equipment levels and addresses issues with monitoring power environments and power failures.

SECURITY

■ **AlgoSec** announced the launch of FireFlow, an end-to-end policy change workflow solution that helps organizations reduce risk, enforce security policies, and increase efficiency. FireFlow is a companion product to the AlgoSec Firewall Analyzer, and it features an automated workflow management process; assistance with translating business requests into actionable policy changes; and integration with enterprise management systems such as BMC Remedy and HP ServiceCenter. FireFlow supports multiple vendors, including Check Point, Cisco, and Juniper.

.....
■ The Threat Management System 3100 is the first 10GB system for DDoS detection and mitigation, according to purveyor **Arbor Networks**. The TMS 3100 provides attack detection and protection at the application layer. It also performs DPI inspection of more than 80 critical IP services and applications, including DNS, VoIP, IM, and P2P. Arbor offers the system as part of its Peakflow SP platform for service providers.

.....
■ **Imperva** has released the SecureSphere WAF (Web Application Firewall), a closed-loop solution for controlling the Web application security life cycle on production systems. SecureSphere WAF tackles application security from quality assurance/testing into production via bidirectional incorporation with vulnerability scanning devices from Cenxic, HP, IBM, and NT Objectives. It features Dynamic Profiling, which is a technology designed to discover and document application alterations in live applications. Then, it forwards this data to scanners. The SecureSphere WAF was created to meet the requirements of the PCI (Payment Card Industry) DSS (Data Security Standard), which requires organizations set up a WAF or execute an application code review by June 30.

.....
■ **Palo Alto Networks** has announced the addition of the PA-2000 series of midrange platform firewalls to its product family. The PA-2000 series is designed to cost-effectively achieve comprehensive, user-specific visibility and policy control over the applications that flow in and out of networks for organizations with remote locations. These features can be utilized regardless of port, protocol, or SSL encryption. Other features include App-ID, User-ID, and Content-ID. App-ID provides comprehensive visibility and control over hundreds of applications and enables policy enforcement. User-ID is user- or group-specific

Go to Page 20

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- 4. Make a snow angel.
- 3. Cold shower.
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Product Releases

Continued from Page 19

policy definition and reporting with ActiveDirectory, and Content-ID offers real-time threat prevention, URL filtering, and file blocking. Offerings in the PA-2000 series start at \$12,000.

.....

■ **Process Software** has announced the release of SpyCatcher Enterprise v5.1, a spyware detection engine. SpyCatcher Enterprise v5.1 enables administrators to run and schedule hundreds of different environmental threat reports and produce summaries of spyware detections with drill-down views. New features of the application include the Profiling Engine, which offers enhanced Web-based reporting capabilities and custom groups, and Deep-Defense, an application-intercepting technology that blocks spyware.

.....

■ **RSA** announced the RSA File Security Manager 2.2, a turnkey capability for the RSA Data Security System encryption and key management suite that helps secure sensitive data in file systems. The RSA File Security Manager focuses on transparent encryption and the access control of sensitive data in files and folders on Windows operating systems and Linux servers. It provides an extra layer of access control to enable a “separation of duties” between security and systems administration. The RSA File Security Manager also restricts full file access to only authorized users. Another improvement in version 2.2 is integration with RSA Key Manager technology, which offers enterprise key management for multiple encryption solutions at the application, file, and storage layers.

.....

■ **StoneFly** has introduced SAN-based encryption as part of the StoneFly ISC (Integrated Storage Concentrator). Businesses running multiple servers storing sensitive information can consolidate data on the SAN. The SAN-based encryption capabilities increase overall internal and external security for enterprises. StoneFly is offering Advanced Encryption Standard 256 along with iSCSI volume-based encryption. According to Baman Jalali, director of product management for StoneFly, “It is essential today that organizations ensure that information vulnerabilities are eliminated across all facets of the enterprise. SAN encryption adds another level of protection to prevent compromises against internal systems, and it does this much more cost-effectively than host-based encryption solutions.”

.....

■ **Tizor Systems** announced Mantra 6, which includes updated features for data discovery, database security, and ease of use. Mantra 6 offers automated discovery for finding databases and specific classes of sensitive data. And with session termination for blocking unauthorized or suspicious database activity, Mantra 6 can allow companies to combine database monitoring and auditing with preventive controls. Mantra’s TAP (a lightweight, host-based agent for monitoring network and local database activity) has also been enhanced to prevent or block activity in real time, so companies can prevent unauthorized privileged user activity or the granting of privileges to unauthorized users. Inappropriate access can be prevented both over the network and by users going directly to the database console.

SERVERS

■ **Sun** unveiled the Sun Blade X6450 Server Module, which is a blade server designed to handle compute-intensive, high-performance computing and enterprise applications in manufacturing, energy, and financial services industries. The Sun Blade X6450 Server Module is powered by four high-performance dual- or quad-core Intel Xeon processors and supports operating systems such as Solaris 10, Linux, Windows, and VMware. The offering also supports current 32-bit applications and current and future 64-bit applications. The Sun Blade X6450 starts at \$8,655.

Sun also introduced its latest updates to the Sun Constellation System, a high-performance computing platform designed to address the needs of commercial customers of all sizes, including large research institutions. The latest Sun Constellation System components include the Sun Blade X6450 Server Module and the Sun Datacenter Switch 3x24, which let users scale from a single rack at approximately 7 teraflops to over 2 petaflops within the same architecture. Sun’s Open Storage products include the Lustre File System, the Sun Storage and Archive Solution, and Solaris ZFS File System. Sun’s portfolio of HPC software includes Sun HPC Software Linux Edition 1.0, Sun xVM Ops Center 1.1, Sun Visualization Software 1.1, Solaris HPC Developer Preview, Sun HPC Cluster Tools 8.0, and Sun Grid Engine 6.2.

SERVICES

■ **Lenovo** introduced Lenovo ARS (Asset Recovery Services), a set of services to help business customers in the U.S. and

Canada manage their end-of-life technology equipment by providing computer take-back, data destruction, refurbishment, and recycling. With this eco-solution, customers can fulfill green information technology commitments knowing their equipment is disposed of in a secure and environmentally responsible way. Data destruction on discarded computers is performed according to the U.S. Department of Defense standards. Lorenzo prioritizes refurbishment and reuse and then focuses on recycling. As the number of computers in the U.S. increases and older ones are retired, recycling programs give new life to end-of-life products. Lenovo offers additional services, as well, including inventory, value assessment, onsite deinstallation, and data encryption. Lenovo can facilitate donation of the old computers or can help customers receive cash back for them.

STORAGE

■ **Brocade** unveiled three new Brocade 8Gbps fabric switches for the HP StorageWorks B-Series SAN Connection product line. This line of products was created to provide high levels of performance in the industry and reduce energy consumption in the data center. Configurations that range from eight to 80 ports are available, along with better fabric switches made to provide full line-rate performance on every port and easier management. These products also consume 40% less power per port than previous models. The company announced that a custom 8Gbps embedded SAN switch module for the HP StorageWorks EVA4400 (4400 Enterprise Virtual Array) will be available next month.

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Product  Releases

■ **Buffalo** announced its MiniStation DataVault, a portable data storage device. MiniStation DataVault contains a hard drive with hardware-based full disk encryption that employs 128-bit AES technology to save data and protect it with an encryption key. Data is transferred via TurboUSB technology, a unique transfer rate and instant operation created by Buffalo. MiniStation DataVault is compatible with Windows and Mac OS X operating systems and includes mobile versions of Mozilla Firefox Web browser and Mozilla Thunderbird email clients. A rugged exterior with a floating and highly shock-absorbing inner structure holds the drive, protecting it from drops and hits. The Buffalo MiniStation DataVault costs \$129 for 160GB of storage space and \$209 for 320GB.

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■ **Dell** announced PowerVault MD1120, a storage expansion designed for 2.5-inch disk drives. PowerVault MD1120 features 24 small form factor drives that use 70% less space and 50% less power than 3.5-inch models. Dell has built the PowerVault MD1120 to share common disk drives with select Dell servers, resulting in simpler management and reduced cost of stocking spare parts. PowerVault can scale six enclosures and house 144 drives when attached to Dell’s PowerEdge RAID Controller, connected by a 3Gbps Serial Attached SCSI interface.

.....

■ New from **Enhance Technology** is the UltraStor RS16 FS, a dual 4Gbps Fibre Channel storage system with SAS expansion ports. Suitable for high-performance, mission-critical environments, the 64-bit system is as fast as it is expandable. By daisy-chaining four more optional RS16 JS

JBOD units, the UltraStor RS16 FS is scalable up to 80TB. It can use a heterogeneous mix of SAS and 3Gbps SATA drives, too. The system supports SFP copper or optical interfaces, redundant PSUs and fans, and hot-swapping using drive trays.

.....

■ **LaCie** announced the Little Big Disk Quadra 1TB. Joining 500GB and 400GB (7,200rpm) versions, the Little Big Disk includes two 2.5-inch hard drives that work together in a built-in RAID 0 configuration to enable up to 110MBps burst transfer rates when using eSATA or up to 80MBps if using FireWire 800. With one eSATA 3Gb, two FireWire 800 (FireWire 400 compatible with included adapter), and one USB 2.0 interface, the Little Big Disk allows universal connectivity for cross-platform compatibility. Featuring the well-known LaCie d2 heatsink design, the Little Big Disk is entirely fanless, which allows it to operate flawlessly without posing as a noise distraction when editing content. The sturdy Little Big Disk is bus-powered by the FireWire interface and weighs a little over 1.4 pounds. Fully compatible with Mac OS X 10.5 Leopard (including Time Machine) and Windows Vista, the Little Big Disk Quadra comes with the LaCie Setup Assistant and advanced backup and restore software. It can also be daisy-chained using one of the two FireWire interfaces with other LaCie hard disks or DVD±RW drives.

.....

■ **Neverfail** has announced Neverfail ClusterProtector, the latest addition to the Neverfail Continuous Availability Suite. ClusterProtector is designed to offer continuous, real-time data replication and constant availability to mission-critical applications

and data for Microsoft Windows Failover Clustering. By replicating data in real time over a WAN to the remote disaster recovery site, Neverfail ClusterProtector is designed to be a failsafe way to keep organizations running without the need to reconnect any application, and it supports Microsoft Exchange Server, Microsoft SQL Server, and Microsoft Office SharePoint Server. Neverfail ClusterProtector will be available next month.

.....

■ **Seanodes** introduced the VM (Virtual Machine) Edition of Exanodes to extend capabilities for the server virtualization software to application servers’ internal disks. Exanodes VM Edition converts direct-attached storage into network storage. The VM Edition of Exanodes is designed to enable the consolidation of an organization’s underutilized server storage into a high-performance virtualized storage pool. It requires no target management, no additional hardware, no need for external SAN storage or fabrics, and no specific storage competencies. Exanodes VM Edition offers highly available reliability through catastrophic fault tolerance, which includes self-healing capabilities and the ability to rebuild a 1TB disk in less than 40 minutes. Pricing for Exanodes VM Edition starts at \$500 per terabyte.

.....

■ **Toshiba Storage Device Division** has announced 5,400rpm small form factor hard drives available in single-platter 80GB and dual-platter 160GB models. Toshiba says the models are the industry’s highest-capacity series of SATA 1.8-inch HDDs available. The models include the 160GB MK1617GSG and 80GB MK8017GSG, which reduce the storage footprint by nearly

40%, compared to 2.5-inch drives. The models feature a micro-SATA connector and SATA 1.5Gbps interface. The models share the same architecture base as Toshiba’s 2.5-inch HDD product line, allowing for cross-platform compatibility, and have certified compliance with the SATA 2.6 specification. The new models will start shipping in August.

.....

■ A new solid-state disk from **Transcend** packs 64GB of capacity into a 2.5-inch form factor. Made of SLC (single-level cell) NAND memory, the new SSD is built for speed with either a SATA or IDE interface. Transcend claims 119MBps read and 64MBps write rates, which are competitive among today’s SSDs, if not record-breaking. Apart from SSDs’ many advantages over hard drives—no moving parts, lower power consumption, higher impact and vibration tolerance, and much more—the new drive benefits from Transcend’s ECC and wear-leveling technologies for long, reliable service.

.....

■ **Verity Systems** launched the VS7000 Hard Drive Destroyer, a manually operated unit designed for the destruction of all standard hard drives and laptop drives. The VS7000 takes less than 15 seconds to destroy each hard drive. Operators insert the hard drive into the slot and crank the handle eight rotations. The internal workings of the VS700 press down on the drive, bending it approximately 90 degrees. The bend will render the hard drive useless by bending the platter, damaging the heads, the motor, and the circuit board. A standard ratcheting feature is also included to make it easier to destroy unusually hard-to-break drives or process a high quantity of drives.

STORAGE

MAY 16, 2008

Versatile Dual-Mode Shipping Case



Safely Transfer Enterprise Hardware With The Pelican 1730

THE TRANSPORT AND protection of sensitive equipment should be important to any company that cares about the integrity of its products. Items such as flat-screen displays, hard drive towers, and server nodes need to be moved with careful consideration so as not to disrupt vital components during ship-

ping. IT professionals who oversee valuable hardware understand how essential it is to have a dependable mode of transportation.

Pelican’s 1730 Transport Case functions as a reliable case that protects even the most fragile supplies as they’re sent from location to location. With 10,000 cubic inches of

configurable storage, the 1730 is designed to be moved either individually or stacked on pallets. Mobile-friendly features include polyurethane wheels, nylon hubs, and two double-wide handles convenient for manual towing. Stacking multiple cases is never an issue with four extra-deep, base-to-lid locking cleats, and the case’s dual-action latches are built to withstand close to 400 pounds.

The automatic pressure equalization valve prevents moisture from entering the case. This feature also enables the case to adapt to any altitude. The optional manual pressure regulation is ideal for housing equipment that requires a temperature-controlled environment. If the humidity level changes inside the case, the humidity gauge will change color as it rises above 40%.

Other characteristics that make the 1730 design unique include the sturdy, yet light, solid wall architecture with open cell core, polymer construction, watertight O-ring seal, and fold-down handles. Inside is the customizable Pick ‘N Pluck foam, which comes as a five-piece set.

Pelican 1730 Transport Case

\$549.95

Durable storage case safeguards movable supplies and regulates temperature-sensitive equipment

(800) 473-5422

www.pelican.com



SECURITY

MAY 16, 2008

Manage Unstructured Data

Keep Data Under Wraps With Pentura’s Data Risk Assessment Service

AS THE AMOUNT OF DATA generated by organizations continues to grow, the lack of visibility surrounding the content and user access increases the risk to the business. At the heart of the problem is business-critical data that without classification and correct permissions poses a large risk to company security. Pentura’s Data Risk Assessment

Service allows companies to identify potential risks around data security without the need to invest in expensive dedicated hardware and software tools.

The Data Risk Assessment Service begins by providing visibility of the unstructured data on the network. Once it is determined where the data resides, Pentura will consult with you to classify

the data based on three key factors: confidentiality, likely data owners, and current permission levels. Following the identification of the key data assets, Pentura is able to model and report on the usage of such data over an agreed period of time.

On completion of the audit, Pentura will then advise on the correct least privilege access

model and policy for the data in question, reducing potentially excessive permissions and providing a measurable reduction of risk for the business.

The Data Risk Assessment Service provides IT administrators with best-practice advice to assist with Active Directory users and groups, so IT staff can also address data leakage prevention on a continual basis.

Organizations can also use information in the Data Risk Assessment report to satisfy internal and external audits without the use of heavy resources or large investments.

Pentura Data Risk Assessment Services

Service that enables organizations to classify and assign permissions to unstructured data

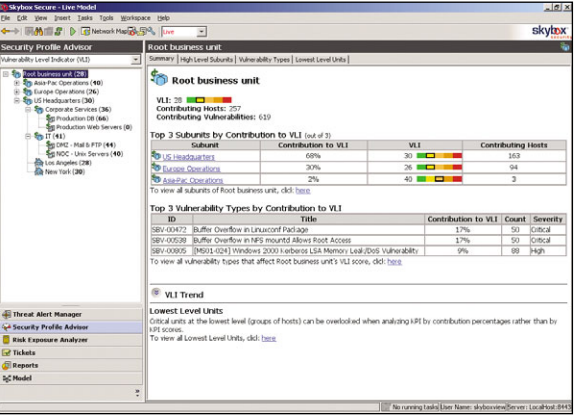
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Visible Network Protection

Skybox View 4.0's Automation & Analytics Provide Transparency & Security



Skybox View 4.0 organizes important security information and makes it easy to sort through.

MOST ORGANIZATIONS have a security point solution, but many of these programs produce a large amount of data, which can be difficult to sort through. And with the diversity of today's threats, managing the life cycle of risk and protecting the network is harder than ever. The Skybox View 4.0 helps alleviate security risks while also providing a unique mix of automation and analytics.

Skybox View 4.0 is a modular and scalable fourth-generation software platform designed to help organizations find and prioritize high-risk areas and foresee compliance vulnerabilities. The mix of automation and analytics provides insight into possible IT security gaps and threats, so organizations can protect

themselves. Skybox View 4.0 also offers simulation, workflow management, and decision-support analysis. Through these capabilities, Skybox View 4.0 can craft large amounts of information into precise, timely, and organized plans.

Customers who have implemented Skybox View 4.0 have seen their IT risk exposure window reduced by 95%, the cost of security compliance decrease by 85%, and time and labor decrease

between 80 and 90% as a result of the optimization of manual processes.

Skybox View 4.0 provides a generous package of reporting capabilities, including tailored reports for specific audiences.

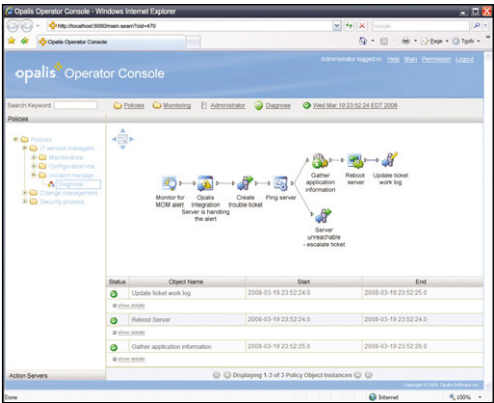
Skybox Security Skybox View 4.0

Starts at \$50,000, based on network size
Offers a mix of automation and analytics to help security risks become more transparent to organizations
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Manage IT Processes

Opalis Integration Server 5.5 Reduces Costs & Downtime



From Opalis' Operator Console, users can view automation across the entire network.

IT'S WELL KNOWN that a large portion of IT budgets is spent on maintaining systems already in place. Because of the variety of hardware and software required to run an IT center and the lack of integration between the parts, many tasks must be performed manually. This results in a high number of human errors, which is the primary reason for network downtime.

More automated IT processes and tasks, coupled with better interoperability between different vendor's products, greatly reduce network maintenance costs, as well as network downtime. Opalis Software addresses these issues with Integration Server 5.5. The software is designed to help managers oversee the IT infrastructure more effectively, free up important resources, and generally reduce operational costs.

Features of Integration Server 5.5 include means to efficiently and effectively monitor, operate, and manage data center processes. The New Executive Dashboard gives executives business perspectives and operational metrics to aid in monitoring IT effectiveness. Information included on the customizable dashboard includes status of critical processes, service-level agreement attainment, and return on investment.

The Operator's Console provides comprehensive automation and includes options for both attended and unattended automation. Users have a single view of automation across the entire enterprise that provides direct interaction with running automation so network health indications can be identified and dealt with quickly.

Other options include being able to manage multiple data centers from a single point of control, expanded capabilities for managing the most complex data environments, and options for managing multiple customers from a single deployment.

Opalis Integration Server version 5.5

Integrates the variety of hardware and software in a data center and automates many of their functions
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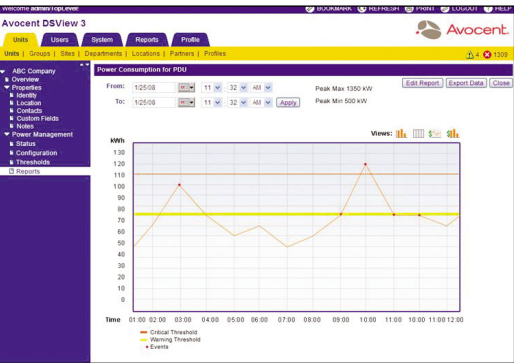


PHYSICAL INFRASTRUCTURE

MAY 16, 2008

More Power Management

Avocent's DSView 3 Power Manager Helps Admins Measure Data Center Energy Use



DSView 3 Power Manager helps managers monitor and track power consumption in the data center.

A LARGE PORTION of the cost of running a data center centers on power consumption. If companies have greater control over power monitoring and management, they can save substantially on costs.

The DSView® 3 Power Manager, a plug-in for Avocent's DSView 3 management software, addresses this need. DSView 3 software provides centralized management of all attached network devices by consolidating all views into a single interface. The plug-in enables users to collect information about the power being used by a unit, rack, or row of racks to more effectively manage power efficiency, reduce problems with outages, and reduce costs. DSView 3 Power Manager provides a calculator to help managers see power-to-dollar costs by converting the

amount of energy used from kilowatts to kilowatt hours.

Features of the plug-in include Consumption Reports, Trend Reports, Thresholds, and Alarms. Consumption and Trend Reports track energy use over user-defined time periods and monitor energy consumption over time. Users can set critical level warnings, as well as customizable actions to solve problems with Thresholds, and managers can customize Alarms to alert them when threshold levels are approached.

By integrating with sensor hubs from Uptime Devices, DSView 3 Power Manager provides environmental monitoring and reporting that includes temperature, humidity, and water levels. When paired with Avocent's PDUs, managers can also monitor and control individual outlets and outlet groups.

DSView 3 Power Manager

Power Manager plug-in: \$4,995; DSView 3: \$2,495
Provides detailed monitoring and reporting about power consumption for data center managers
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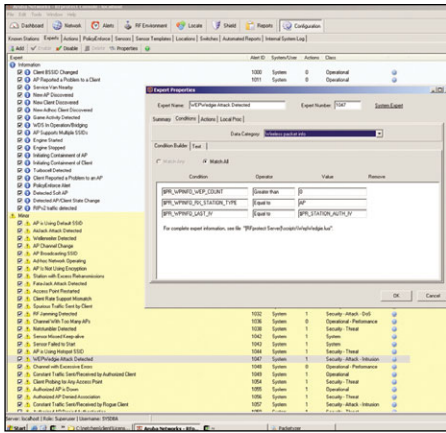


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Security On Demand

User-Generated Threat Definitions Added To Aruba Networks' RFprotect



RFprotect provides detailed information about each detected threat.

ARUBA NETWORKS' LATEST version of its RFprotect software, a product line acquired from Network Chemistry last year, brings user-created threat definitions to your WIPS (Wireless Intrusion Prevention System).

RFprotect WIPS software lets users create an attack-detection signature as soon as a vulnerability shows up. In so doing, it prevents breaches from unknown, undisclosed, and unpatched attacks. The software automatically alerts users to network susceptibilities and blocks unauthorized clients, rogue APs, and unknown ad-hocs. RFprotect also enforces organization-specific security policies and delivers compliance reports.

The RFprotect product line includes two packages, RFprotect Mobile and RFprotect Distributed. RFprotect Mobile is a wireless analysis tool that lets users locate suspect devices and conduct security audits, site surveys, and troubleshooting. It features a Site Survey Analyzer, to let users perform onsite RF surveys, and a WLAN Vulnerability Scanner, capable of identifying Wi-Fi device weaknesses.

RFprotect Distributed is a wireless intrusion detection and prevention system with complete threat detection, attack prevention, "no wireless" enforcement, and compliance reporting. It includes the TotalWatch feature, letting users continuously monitor the 2.4 and 5GHz bands, and the PolicyEnforce feature, letting customers prioritize wireless threat policies.

Users needing information about attacks can go to the Wireless Vulnerabilities and Exploits database at www.wve.org.

Aruba Networks RFprotect

Starts around \$5,000

Dynamic signature updating software for WIPS helps protect against zero-day attacks

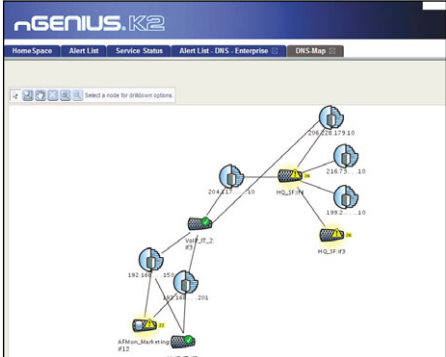
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Application Services View

NetScout's nGenius K2 Provides Visibility To See Status At A Glance



You can determine network status at a glance.

ASSESSING THE HEALTH of applications and services on a network is of utmost importance. However, relying on incomplete information leaves critical gaps in the information flow. NetScout's nGenius K2 uses packet data to acquire network and application monitoring information. The packets contain a rich source of performance data.

nGenius K2 provides network monitoring professionals with a clear picture of network and application health with Service Views, complete with icons for each application service that bear the number and color-coded warnings of various performance levels. Further information can be gleaned from flow and packet details under each application service. The entire interface is designed to help reduce Mean Time to Repair/Restore. The

Virtual Service Network Map uses red, yellow, and green indicators to show where a degradation has occurred. Service Summaries under Service Views offer status snapshots with charts and tables to allow managers to view details on service states over time.

Other key features include Early Warning System and nPN (nGenius Performance Network). Early Warning System leverages NetScout's analytics engine and key performance indicators. nGenius K2 learns normal behavior patterns for key performance metrics and alerts network monitors when significant changes occur. Early warnings can go directly to most network management consoles.

The nPN service displays service views and early warnings of the monitoring application itself and all related devices, including nGenius Performance Manager servers, nGenius Probes, and nGenius InfiniStreams.

NetScout nGenius K2

Starts at \$75,000

Provides at-a-glance status and early warning of performance degradations

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A Data-Centric Security Model

Data Protection Is The Ideal Supplement To Traditional Infrastructure Security

by Kurt Marko

IT SECURITY PROFESSIONALS must feel like they’re engaged in a perpetual game of cat and mouse with hackers, identity thieves, and even organized criminal syndicates—as fast as they deploy security countermeasures, these rogue elements discover loopholes or entirely new avenues of attack. Traditional security methods have relied upon closely guarding the perimeter of a company’s network and tightly controlling ingress and egress between private intranets and the “wild” Internet.

The continuously escalating and mutating threat environment has led many firms to layer security countermeasures one upon another; starting with firewalls, companies have added intrusion detection and prevention systems, malware filters, client-side firewalls, and encrypted network tunnels. This scenario is reminiscent of the stereotypical urban apartment dweller with three deadbolts and a chain on the front door, bars over the windows, an alarm system, and a German Shepherd growling in the foyer. Unfortunately, no matter how fortified the apartment, eventually our paranoid protagonist must leave the friendly confines of home to work or shop. Likewise, today’s networked business can create a virtual fortress around its infrastructure but still must share information with mobile employees, external business partners, and remote customers.

Instead of adding another lock to the door, our hypothetical urbanite might be better suited by hiring a bodyguard. Analogously, many businesses now realize that rather than continuing to add layers of infrastructure security, it’s more effective to protect critical data throughout its life cycle, regardless of where it resides or moves. This concept of protecting data rather than devices is known as data-centric security.

A New Security Model

Changes in business practices are driving the security strategy. As Forrester analyst Paul Stamp notes, while companies have increased accountability for sensitive data, today’s distributed, globalized, disaggregated business environment compels more open access to that very data. He says, “The challenge for the security and risk professional is

to support these changes while ensuring that data is protected in the way the business demands,” adding that “companies are responding to this by shifting their emphasis from traditional measures of bolted-on perimeter and infrastructure protection to deploying a more data-centric approach to security and new approaches to infrastructure architecture.”

Perhaps the first, and still the most thorough, explication of the DCSM (data-centric security model) came in a December 2006 whitepaper from a team led by Mike Bilger at IBM’s Security and Privacy Global Services unit (www.ibm.com), in which they trace an evolution in security thinking from network- to host-based defenses. They note, “If we extend this layered defense approach further, beyond host-based security to the data that is protected on those hosts, we arrive at the DCSM.” Their vision is of a holistic approach to protecting data assets by assessing the value of individual pieces of information and then defining specific controls and security measures for each.

A conceptual model developed by industry consortium The Open Group’s Jericho Forum describes the move away

network, every component will be independently secure, requiring systems and data protection on multiple levels using a mixture of encryption, inherently secure communications, and data-level authentication.”

Data-Centric Security Fundamentals

End-to-end data protection begins with understanding the types, sources, and value of a company’s information assets. IBM’s experts advise that, “The first consideration of a DCSM is to determine a set of guidelines for enterprise-wide data handling based on business policies. The next consideration is to determine which security services are required to support these guidelines.” This entails classifying business data and then outlining how certain classes of information are handled and protected. According to Bower, the goal is to persistently protect data until it’s accessed, checking a user’s credentials at access time to determine their rights and privileges to the information.

Data classification and protection rely upon a robust set of traditional security services, such as authentication, authorization, access control, logging, and auditing. As Stamp points out, “Infrastructure-centric measures will always be an underpinning for data-centric security; even with a more data-centric approach to security, it’s unlikely that enterprise architects and security professionals will ever get to the stage

End-to-end data protection begins with understanding the types, sources, and value of a company’s information assets.

from exclusive reliance on infrastructure security as deperimeterization. They observe, “The huge explosion in business collaboration and commerce on the Web means that today’s traditional approaches to securing a network boundary are at best flawed and at worst ineffective.” Mark Bower, director of information protection solutions at Voltage Security (www.voltage.com), agrees, adding that the proliferation of mobile devices and portable storage have made perimeter security solutions infeasible.

While the Jericho Forum’s authors acknowledge that traditional security techniques will continue to be important, they note that data-centric approaches are critical in the new deperimeterized world. They conclude, “Ultimately, in a fully deperimeterized

where they can protect a piece of data once and let it remain protected in the same form throughout its life cycle.”

Implementing Data-Centric Security

While data-centric security can seem like a radical departure from traditional techniques, Stamp sees some best practices and new technologies that can smooth its integration into an overall security plan. He advises security professionals to work closely with counterparts in infrastructure and operations to formulate a strategic data protection plan that clearly articulates business benefits and minimizes complexity. He also notes the importance of tying data security into an overall risk management strategy: “When transitioning from an infrastructure-centric

model to a data-centric model, you’re going to need to prioritize areas to invest in new technologies and architectural changes”—prioritization that draws upon a risk analysis to optimize ROI and justify investment expenses. He adds that technological solutions, including endpoint data encryption, identity management, secure data transport (VPNs and SSL), real-time content inspection, and network access control, also facilitate data-centric security.

Unlike the one-size-fits-all approach of a perimeter infrastructure security strategy, “The primary goal of data-centric security is to drive security controls from a business requirements perspective,” say IBM’s experts. This is achieved by separating data classification and security policy from data protection measures and then applying specific, tailored controls to different classes of data. Yet data-centric security shouldn’t be considered a replacement for traditional infrastructure-based solutions but rather an overlay providing greater control in today’s deperimeterized network. As Stamp concludes, “To enable data-centric security, organizations will redeploy existing measures like firewalls and virtual private networks, as well as implement new technologies, like virtual desktop infrastructures.”

Key Questions For Data Classification & Control

An organization needs to address several key questions when classifying information in preparation for a data-centric security strategy, such as:

- Where did the data originate?
- Who owns the data?
- Who controls the data?
- Who or what holds the data?
- What type of data is it?

Once information is classified, various controls can be applied to individual pieces of data; these include:

- Who or what can use the data and for what purpose?
- Can it be shared, and under what conditions?
- Where will the data be kept and for how long?
- Does it need to be safeguarded at rest, when backed up, and/or during use?
- How can the data be disclosed?
- What subset can be disclosed?
- What protection must be implemented?
- Does the data need to be distorted or watermarked?

SOURCE: “DATA-CENTRIC SECURITY: ENABLING BUSINESS OBJECTIVES TO DRIVE SECURITY,” BY MIKE BILGER, LUKE O’CONNOR, MATTHIAS SCHUNTER, MORTON SWIMMER, AND NEV ZUNIC; IBM GLOBAL SERVICES; DECEMBER 2006.

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4. Browse the list and read the **brief descriptions** to find what you need, then click the link to see the **complete article**.



Information is updated regularly,so be sure to check back often!

Keeping IT Projects On Track

Proper Planning & Communication Can Help Sidestep Project Snags

by David Geer
• • •

DELAYS AND COST overruns are common for IT projects, forcing them off course or ending them entirely. So, how can data center leaders launch projects that are destined for success?

While no one thing gets an IT project off the ground, keeps it on course, and brings it to maturity before it runs out of fuel, implementing the proper mix of steps, such as getting everyone onboard, addressing common issues before the project starts, and protecting against project-spoiling pitfalls, can bring a project closer to completion.

Get Everyone Involved

One way to pull projects to completion is to tie them closely to the company’s business objectives, according to Thomas Christel, vice president of marketing for Yooplus (www.yooplus.it), an enterprise 2.0 collaborative and sharing technology startup. “There has to be a direct link between your project and one or more of these priority objectives,” Christel says.

To ensure that an SME ties IT projects to business, the SME should let the business side express a need and then meet it with an IT project that is tailored to that need, according to John J. Thompson, managing partner with the Sonland Company. Also,

make sure you communicate the benefit of the IT project in terms business can understand, explains Daniel Tautges, president of operations for the express business unit at Global DataCenter Management (760/632-1043; www.gdcm.com).

From there, get all the stakeholders to sign a project charter. “The project charter is your cornerstone document,” says Christel; the project team creates all other documents based on this document. A good project charter lays out the scope, available resources, people’s responsibilities, the project timeline, and constraints you must adhere to, according to Thompson.

To help you create an effective charter, first define the target of the project and then work back from there, according to Tautges. “Filter down from the original goal to individual objectives and assign those out to people. By working backwards, you can define resources up front for the life of the project.”

Christel recommends using a flat project team approach throughout the project, a management style that engages resources from all functions across the organization to stimulate idea generation and cross-functional project support.

With this approach, someone from every business unit affected sits on the team and funnels information in and out between IT

and the business, explains Thompson. This way, the business has input from each unit that has requirements and can apply checks and balances against project errors.

Keep Communication Lines Open

Project transparency gives the team a complete view of the whole project. One way to provide transparency is by using workflows and workflow tools that let business process owners see how each part of the project is progressing, suggests Tautges.

Transparency is possible through a common project workspace, such as a shared hard drive where people contribute their work and examine the progress of other project components. SMEs can aid transparency with tools as simple as a newsletter that reports updates about the project.

Another way to make sure everyone is happy with the results as you drive the project on is to get end users involved. Have

time,” says Christel. Scope creep happens because the enterprise hasn’t defined project requirements or design clearly enough. To avoid scope creep, finalize the business and technical requirements and have senior management, end users, IT, and the project team sign off on them.

To recognize scope creep as it happens, the enterprise has to have enough metrics in the project plan to see whether they are achieving goals within the scope and on budget, says Thompson. In addition, Tautges explains that to avoid project creep, the project team should focus on project objectives and avoid anything that falls outside those objectives.

Related to scope creep are cost overruns. To avoid them, the business should do adequate needs assessment and impact analysis in the early stages of the project, according to Thompson. Needs assessment, he explains, will help the SME determine whether it needs the project to accomplish its goals. Impact analysis determines whether the project will achieve the desired business results. It’s a sort of counting of the cost before you begin.

Other Project Pitfalls

IT staff shortages can also do damage to project progress. Internal staff may have daily operational responsibilities to tend to in addition to project duties, according to

No one thing gets an IT project off the ground, keeps it on course, and brings it to maturity before it runs out of fuel.

end users create an “as is” model that demonstrates how they accomplish the business process today and then fashion a “to be” model that shows what they want the process to be as a result of the project. “The business will prioritize and [assign] weight [to] the resulting project requirements, and IT will prepare the design from those requirements,” says Thompson.

Another good way to support project success is to have upper-management buy-in and support from the beginning and throughout the project, according to Christel, who explains that someone specific from the executive team who champions your project as a cause will help see it to completion.

“The absence of senior management awareness of the project is a bad sign,” says Thompson. Adds Tautges, to keep executives engaged, it’s good to have a system of reporting to regularly update management about project progress in specific areas.

Avoid Project Creep

Scope creep, also called project creep, is a typical pitfall of IT projects. “This is when your project tends to get bigger over

Thompson, and there may be an issue prioritizing duties to get everything done. Where prioritization isn’t the issue, the enterprise can look to temporary contractors to offset the shortage for a few months.

Another pitfall is a lack of project communication and documentation. “As in anything, communication is key. Virtual and face-to-face meetings (both private and public), memos, presentations, emails, phone calls, and even the project charter are examples,” says Christel.

Equally, SMEs should document everything in meeting notes and other records. “A project blog is a perfect day-to-day record of your trip to project success. A wiki captures and updates project information as the project matures,” Christel says, adding that project documentation helps to capture use of best practices and any lessons learned.

Finally, a lack of focus on motivation can hurt projects. If the enterprise is going to ask team members to give more, such as showing up on a Saturday or staying late for application testing, they should be offered rewards and incentives such as individual recognition in meetings or team outings for dinner or sports events. ■

Resolving Common Project Problems

IT projects experience any number of pitfalls. John J. Thompson, managing partner for the Sonland Company, points to three problems in particular and offers suggestions that will help you avoid those traps.

Absence of corporate prioritization. Get C-level management to agree on the corporate objectives for the project. These managers should outline how the company will benefit from the project’s goals and accomplishments and establish parameters that the project can function within, such as budget limits, whether to outsource and outsourcing constraints, and timeframes for project delivery.

Improper selection of outside vendors, products, or services. You should bring in objective

industry experts for guidance in selecting vendors. Use a formal RFP (request for proposal) process to get proposals from each vendor. The RFP should include a process for evaluating the vendor, criteria for selecting a vendor, a required product demonstration by the vendor, and a vendor site visit. Select vendors that meet or exceed your criteria and expectations for their part of the project. Select companies with a good record of accomplishment, check their references, and observe their product or service in operation at a customer facility.

Quality assurance is cut short. Don’t minimize the importance of QA; instead, use skilled QA resources. QA gets user acceptance and buy-in before production, which is a good way to get internal collaboration on the project from users.

NETWORKING & VPN

MAY 9, 2008

Virtualization Management

Quest Software’s Foglight Monitors Impact On Applications, Users



VIRTUALIZATION management has become a main focus of many businesses and small enterprises. Application virtualization and application streaming need to be monitored and seen from the end user’s point of view.

Quest Software Foglight version 5.2 can help monitor the impact of virtualization on databases, applications, and end users

Foglight manages all views of the virtual environment and correlates the virtualization activity with the rest of the application environment.

while correlating the usage of resources across physical and virtual platforms.

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The management of mission-critical applications within a virtualized environment is extremely important. Most of the time, problems are not recognized or dealt with properly. Foglight helps companies avoid server downtime and the possibility of service disruptions. The newest version of Foglight adds support for VMware.

Foglight monitors the entire virtual infrastructure from the physical servers to the virtual machines and gives organizations multiple resources and options to

help with their overall application management. Using Foglight, companies can contain alarm storms, track virtual machines, view the impact of many virtual machines, receive root-cause diagnostics, monitor VMotion events, and customize views for IT operations, data center teams, and management.

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Systems Management: A Strategic Approach

Making IT A Better Business Customer

by John Brandon

• • •

INFORMATION TECHNOLOGY is complex—too complex for its own good. It’s understandable, though: Emerging technology is nebulous, data centers require detailed analysis to run efficiently, and servers and storage requirements change faster than the wind in a tornado. Yet, according to a report by the Butler Group, IT must do a better job of matching its services with the needs of the business. The time has come for IT—and data centers—to analyze their service offerings using systems management software and then report back to the business decision in a more strategic way. That way, IT services can be better linked to business needs and provide computing as more than just a utility.

Change Is In The Details

While IT has been somewhat removed from business operations because of the growing complexity of computing, the idea of linking services to business needs is not lost on most managers. After all, the capital expense arrangement at most SMEs is such that the various departments inside an organization often pay for IT services either indirectly in a general budget or directly through budget line items. IT rarely exists as a self-contained entity in today’s challenging business climate.

According to Roy Illsley, a research analyst based in the UK and a key contributor on the Butler Group report titled “IT Systems Management: Exploiting the Infrastructure for Business Value,” the first step in any massive endeavor to change a business process is to do the hard work of analysis and research. The classic example he cites is the data center that is running a server at only 2% of capacity. The knowledge about that server is the key point, and how you act on that data should only come after research.

Yet, Illsley says the problem of underutilization, or not matching IT services with business needs, is much more complex than just spotting a server without any flashing HDD activity in a corner.

One example he provides is of a company that runs SAP financial transactions over the noon lunch hour. What the data center managers might not realize is that the HTTP activity spikes over that period,

not because of SAP use, but because employees on their lunch breaks are suddenly checking many of their own bank accounts or buying items online, which stresses all secure connections on the Web and overloads the SAP server. Running systems management software can reveal these poorly matched business use case examples and equip IT to increase quality of service, SLA, and network speed.

“There’s a language barrier between IT and the business side,” says Illsley. “The world of IT is too complex. But if IT can bridge that gap by understanding their services better and communicate about

Instead of just examining what IT is doing, systems management products in SMEs should help link those computing activities to the business’ needs.

those services, they can become a fundamental part of the business: They can help the business side understand the service costs, and IT can help them make better decisions.”

Systems Management In The SME

In the SME market, the variables for this kind of new communication are similar to an enterprise, just on a smaller scale. Instead of 100 people running the data center, there may only be 10. Traditionally, SMEs don’t have the business analysts and communication experts on hand to explain to the business side which services they offer, how they can be utilized, and how they match business process.

“The initial mapping and updating [of services] is an extremely difficult task because IT is often run and treated by the business as a flexible and quick-changing entity,” says Michael Coté, a RedMonk analyst. “The faster you want something to change, the harder it is to track and keep up with. Also, the business wants to spend as little money and time as possible on everything, including IT.”

The vendors at large and small companies are also dramatically different. In the enterprise, it may be Dell, HP, or IBM helping a large company understand its data center usage. For a small or medium-sized enterprise, there are midtier products and tools offered as free, ad-supported packages. These systems management tools are only part of the answer, of course; the resulting data and analysis should lead IT into a place of better, more routine communication: Instead of just examining what IT is doing (or technology just for the sake of technology), systems management products in SMEs should help link those computing activities to the business’ needs.

“The lowest-cost thing a manager can do is to be educated about the business,” says Coté. “Know how the rest of the company makes money, loses it, and depends on you to be profitable. Once you have that baseline set, institute practices to update that ‘checkup’ at a small scale, from monthly down to daily. Once you can regularly answer the question, ‘Is IT helping this company make money?,’ then you can establish tools and practices to improve the so-called ‘IT business alignment’—that is,

making sure IT increases, rather than decreases, the company’s profit.”

Knowledge, Then Action

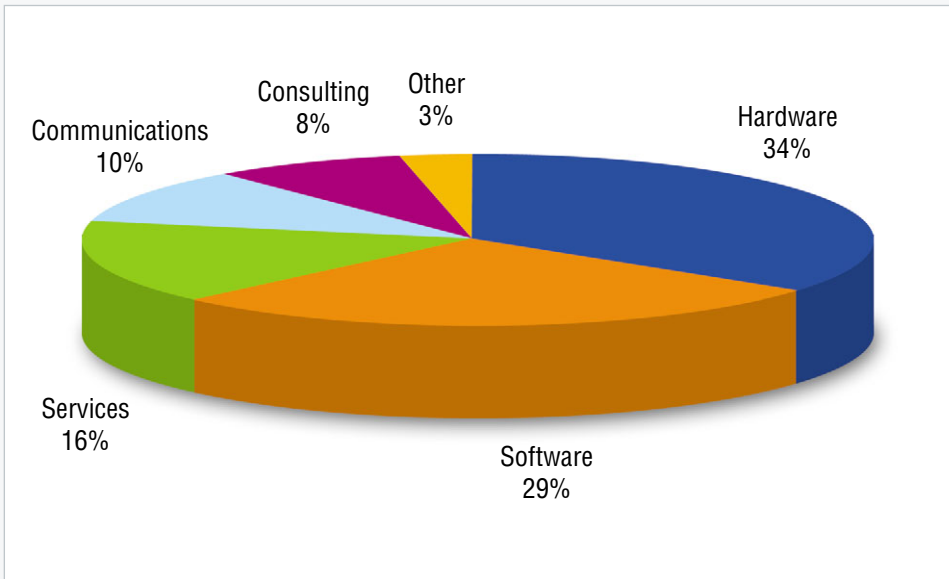
Illsley notes another example where a company can do a thorough analysis of server and storage use. Once equipped with the knowledge of how the systems are used, who is using them and when, and whether those services are stressed to the breaking point or underutilized, they can then communicate with decision makers about how to reallocate. During that process, they may find that a specific business process requires much more intense computing resources. For example, an e-commerce company may decide that the greatest bandwidth should go toward the actual financial transactions that directly affect the bottom line of the company. This kind of IT model is radical in the sense that it is often not deployed, and computing is maintained as a separate entity from operations.

“If someone is going to take five minutes to buy something online, they will go somewhere else, and that is lost revenue for the company,” he says. “Once the business understands this, it is easier to justify the financial decision to the board of directors to use systems management. The problem we see is that most businesses don’t understand what IT delivers, and IT is not good at communicating what they do.”

Once IT has a clear understanding of business goals and uses systems management to find out how services are allocated, they can start building a new process to match technology to business. [P]

Percentage Of IT Spending

As the SME seeks to analyze its business needs and match services, IT can be more strategic with budgets as they examine where they are spending resources and whether those percentages match up with how the business tends to pay for resources. Analyzing spending habits can make systems management more cohesive by helping to align the needs of the business side and of IT and ensuring that dollars are allocated appropriately to both sides. This chart from the Butler Group shows the breakdown of IT spending based on data from 147 respondents.



SOURCE: BUTLER GROUP

Simplified Mobile Solutions

Wyse Viance Integrates With XenDesktop To Improve Desktop Virtualization

AS GLOBALIZATION becomes more important and more professionals are on the move, desktop virtualization has increased. But delivering end-to-end desktop virtualization has its challenges. To help meet the needs of this new mobile workforce, Wyse has introduced the Wyse

Viance family, designed to work with the Citrix XenDesktop product line.

The Wyse Viance family is a sleek, fanless, diskless set of desktop appliances that uses just 13 to 19 watts of power. High-quality video is achieved through locally decoded multimedia, using local processing



power. Drivers and USB ports are then virtualized back at the server, allowing IT personnel to have granular control over which USB peripherals are used, while no new drivers are needed on these devices.

Citrix XenDesktop uses a delivery protocol, ICA (Independent Computing Architecture), which gives thin-client devices, such as the Wyse Viance, PC-like responsiveness to any site or client. Additionally, IT personnel can assign users to dedicated and pooled virtual desktops through XenDesktop, controlling the active and inactive virtual desktop connections. This improves the reliability of the connection for the users.

The Viance Pro Mobile, suited for the mobile professional, is one of the clients

featured in the Viance family of appliances. The Viance Pro Mobile offers 802.11/b/g/n wireless support, along with a 15.4-inch WXGA TFT LCD screen, full multimedia performance (supports WPF-enabled apps), and Gigabit network connectivity for access to quick LAN connections.

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SIX QUICK TIPS

Keep Your Data Center Clean

Tips For Preventing Dust & Dirt Buildup In The Computer Room

by Drew Robb

CLEANING THE DATA CENTER may not be at the top of anyone’s priority list, but it’s the sort of thing that can come back to bite you after years of neglect. The last thing you want is a series of equipment failures due to overheating or, when you look into the cause of the AC failure, to find that the ducts and filters were so clogged with dirt that the system died. The answer is good old-fashioned cleaning—or maybe not so old-fashioned in terms of some of the techniques that have evolved to address clean rooms and data centers.

AC System Cleaning

The bad thing about cleaning is that once you begin, you always notice more and more dirt. So where should you start? Steven Harris, director of data center planning at Forsythe Solutions Group, says to begin with the AC system.

“HVAC and Computer Room Air Conditioner (CRAC) unit maintenance is a quick hit/easy payoff item,” says Harris. “Quite frankly, CRACs are the single most maintenance-intensive pieces of equipment in the data center, with filters requiring the most human interaction.”

Taking care of filter change-out is a simple task that can save long-term headaches. In addition, if the CRAC system uses a supply or return duct system, you should clean that regularly. The air ducts contain dust, dirt, bacteria, mold spores, and other

contaminants that can collect and spread throughout the facility.

Under-Floor Cleaning

If the CRAC unit requires filter changes too frequently, it probably means that it’s time to vacuum the under-floor air plenum. Unfortunately, the spaces under the raised or access floor are typically the most neglected. The old adage “out of sight, out of mind” applies. Dirt, dust, and debris, which collect in and are blown through raised-floor cavities, will eventually make their way into the A/C filters. So keeping that area clean is vital if you want to obtain the most efficiency from your cooling system.

“Just because the space cannot be seen doesn’t mean that dust and dirt can’t collect there,” says Pete Sacco, president of PTS

According to Kevin Vickery, president of ProSource (www.team-prosource.com), unsealed (also known as unencapsulated) floors need subfloor cleaning twice per year compared to once per year for sealed data center subfloors.

“Encapsulating the subfloor is the most neglected area of data center cleaning because an unsealed subfloor is one of the greatest sources of contamination in a data center,” says Vickery. “Live data centers often believe that encapsulating an existing data center is not possible, but this can be accomplished with the right tools and products by qualified companies that specialize in this type of service.”

Regular Scheduling Of Comprehensive Cleaning

Most data center cleaning specialists recommend that managers arrange to have the entire computer room thoroughly cleaned on a regular basis. Vickery says, “Regularly

If the CRAC unit requires filter changes too frequently, it probably means that it’s time to vacuum the under-floor air plenum.

Data Center Solutions (www.ptsdcs.com). “Under-floor dirt can cause unexpected electrical shorts, data transmission problems, and even fires.”

Subfloor plenum cleaning includes vacuuming under the raised floor using filter vacuums. For some organizations, this should be done in compliance with ISO 14644, which applies to certain clean room environments.

“The subfloor is the heart of the data center and is the most critical area that every data center needs to address first,” Sacco says. “Under-floor cleaning is the cornerstone of a complete data center cleaning preventive maintenance program.”

Sealing The Deal

Surprisingly, not all under-floor dirt comes from the room or the AC system. Some of it actually originates in the concrete itself if it is unsealed. An unsealed cement floor will continually absorb moisture and deteriorate. This deterioration leads to dusting of the environment.

scheduled cleanings can help prevent downtime by reducing contaminants that can cause system-related failures.”

Depending on its use and traffic volumes, this might have to be quarterly, but at the very least, professionals should clean the entire computer room twice per year. According to Sacco, this cleaning should include:

Raised-floor surface cleaning. Professionals should clean the surface of the HPL (high-pressure laminate) floor panels, for example, using specialized equipment and chemicals designed for that purpose. HPL access panels that have not been cleaned regularly cannot as effectively dissipate static electricity charges as a clean access panel can.

Equipment cleaning. Dust on equipment that has become settled can cause equipment to retain heat and potentially cause unwanted downtime if not routinely maintained. Therefore, IT staff or professionals should wipe down equipment above the floor to remove dust, vacuum the equipment

Best ROI:

Make Sure IT Staff Takes Part

Because of the amount of manpower needed to provide regular data center cleaning services within the maintenance windows for 24/7 data centers, most IT staffs do not have the time to do it effectively in-house, so they typically bring in outside firms. But that doesn’t mean that IT staff is absolved of all responsibilities.

“The IT staff should make sure that the top of the data center’s access floor tiles are vacuumed and damp-mopped weekly with the proper chemicals and supplies designed for use in data center environments,” says Kevin Vickery, president of ProSource (www.team-prosource.com). “These include HEPA-filtered vacuums, antistatic chemicals, and low-lint mops.”

Easiest Tip:

Boxes Forbidden

Keep materials that cause dust and dirt, such as empty boxes and cardboard, out of the computer room. This will greatly reduce the overall dirt load in the room.

“Cardboard will eventually deteriorate and break down in a typical computer room environment, causing dust and air particulates that will clog filters and collect in the subfloor space,” says Pete Sacco, president of PTS Data Center Solutions (www.ptsdcs.com).

where applicable, and treat it with an antistatic finisher.

Under-floor cleaning. Professionals should HEPA-vacuum the subfloor and clean it by hand where appropriate.

Top-of-floor cleaning and reconditioning. Professionals should HEPA-vacuum the surface of the access floor, clean it to remove embedded dirt, and then treat it with an antistatic finisher. “Most experts recommend that the access floor panels be cleaned quarterly,” says Sacco.

Ceiling void cleaning. Ceiling cleaning includes overhead cleaning above 8 feet by vacuuming above the drop ceiling tiles and/or vacuuming and wiping clean overhead raceways. Further, the type of ceiling tiles can make a big difference when it comes to room cleanliness.

“Change fissured ceiling tiles for clean-room-type tiles,” says Harris. “Fissured tiles continuously flake, giving off microscopic (and larger) particulates, which also end up in the A/C filters—not to mention on circuit boards, on disk surfaces, and in IT equipment filters.”

BONUS TIPS

- **Aim for low traffic flow.** Design the computer space for a low traffic load from the start. The fewer people in the space, the cleaner it will stay.
- **Get outside help.** Major cleaning projects for the data center rarely get done when assigned in-house; something else almost always takes precedent. Don’t be afraid to look to professional data center cleaning companies when you need help.

SECURITY

MAY 9, 2008

Protecting The Perimeter

MX Logic’s MX Perimeter Defense Weeds Out Email Attacks

SPAM, IN ITS various forms, is a network’s worst enemy. Not only does it clog bandwidth and bloat email traffic loads, but spam emails can also contain viruses, worms, and other malware. The best way to deal with spam is to keep as much of it as possible outside the network to begin with, thus limiting the resources needed to dispose of it and the risks involved with letting it land in employee inboxes.

MX Logic’s MX Perimeter Defense, part of the comprehensive MX Logic

Email Defense Service, addresses this issue. Using a database maintained by the MX Logic Threat Operation Center, MX Perimeter Defense compares all incoming mail with a list of known spammer IP addresses to block more than 60% of unwanted email traffic.

Further filtering of worms and viruses is facilitated by Perimeter Defense’s WormTraq virus engine. If any message is found to contain malware or has an IP address that is flagged by the Threat

Center, the connection will be dropped so the message never penetrates the network.

Anonymous connections are also a threat to a network, as they can facilitate DHAs (Directory Harvest Attacks), DoS attacks, and malicious email attachments. To solve this problem, a user’s Internet-facing mail servers point to MX Logic, which conceals them from such attacks. By waging the war against spam at the perimeter, valuable bandwidth is spared for the network to operate more efficiently and with less strain.

MX Perimeter Defense service requires no long-term service agreements, instead operating on a month-to-month basis for users. Live 24/7 phone and email support

comes as part of the service. For additional fees, users can add a number of features to the basic service, including outbound filtering, double or triple antivirus, MX Logic Message Continuity, and MX Logic Fail Safe Service.

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WHAT'S HAPPENING

HellermannTyton Focuses On Preterminated Cabling

RapidNet System Cuts Installation Time

by James Cope

• • •

INSTALLING CABLE TO upgrade an existing data center or to hook up a new one can be time-consuming and can cost a bundle. HellermannTyton (414/355-1130; www.hellermanntyton.us), whose North American headquarters are in Milwaukee, Wis., has come up with solutions it says can offset installation time, whether contractors or in-house staff are doing the installing.

Operating in 30 different countries, HellermannTyton has 2,600 employees worldwide. The company’s global headquarters are in the UK, and its U.S. operations were established in 1969. London-based Doughty Hanson, a European private equity firm, purchased the company in 2006. In addition to the networking and data center market, HellermannTyton also manufactures and sells products to the automotive, manufacturing/OEM, aviation/aerospace, truck/heavy equipment, and wire processing sectors.

Spotlight On RapidNet

HellermannTyton’s Vice President of Marketing for North America Terry Tuttle says the company’s most popular data center product is RapidNet. “RapidNet is a preterminated cabling system offered in copper and fiber. Customers send us the cable specs and the lengths they need, and we attach the terminals, test each piece of cable, and ship the order to the customer,” she says.

In addition, HellermannTyton includes a test report with each RapidNet order, a permanent link test result for copper and insertion loss test results for fiber, according to TIA-568B standards. HellermannTyton’s Milwaukee facility does the RapidNet assembly and testing in the United States.

Instead of sending a box of loose cables, RapidNet preterminated cables come to the



customer in a special cassette. Not only do the cassettes protect the terminations, they also make installation easier. The cassette snaps into a modular panel that fits into a standard 19-inch rack. Tuttle says, “It’s a plug-and-play approach to data center cabling and can reduce installation time by as much as 85% compared to terminating them onsite.”

Carl Howe, an analyst with Yankee Group, affirms that using preterminated components can save time and lower costs when it comes to upgrading or building new data centers. He compares it to modern home building practices. “You can build custom staircases, even walls, in a factory better and more economically than you can build them onsite,” he says. The same approach is being applied to data centers. “People now spend more time in the design phase and less time making cables in the data center. Just like the staircase, more people can afford what is essentially custom-made.”

HellermannTyton, according to Tuttle, was the “first manufacturer to introduce preterminated copper.” That was in 2005.

The company also offers RapidNet fiber. It too is cut and terminated to the user’s specs and tested at the factory.

Data Center Labeling

“Another strength for us is in ID and labeling applicators and supplies,” Tuttle says. “We support the ANSI/TIA/EIA-606-A label standard and [are] working with the industry on the new 606-B data center labeling standards, and we’re very involved in helping our customers understand data center labeling.”

HellermannTyton features the SwiftMark automatic label applicator, which prints self-laminating vinyl labels and applies them to various sizes of cable. It has a cycle time of just more than four seconds. The company also provides labeling templates, downloadable labeling software, printer firmware, and printer drivers from its printing support site at another site, idsolutions.htamericas.com.

Building The RapidNet Line

In the network and data center arena, Tuttle says HellermannTyton will continue to focus on extending its RapidNet line of products. Introduced in March, one product in the works is RapidNetRail, a cable management system employing guide rails that mount vertically on data center cabinets. HellermannTyton offers this new product in partnership with server cabinet company Damac Products in La Mirada, Calif. RapidNetRail works with the Damac’s Axis Extreme and Co-Location Series Cabinets.

RapidNetRail features a patented rail design for quick mounting. It enables the installer to add RapidNet cassettes and

make changes without interrupting rack-mounting equipment in a populated cabinet. It’s designed to work with overhead and raised-floor cable routing.

“It’s an idea that one of our field people came up with; it capitalizes on the unused flat space on the sides of data center equipment cabinets,” Tuttle says. “We’re also coming out with an under-floor zone box.”

Company Collaboration

HellermannTyton’s North America company works closely with its headquarters group in the UK. “We do product development in there,” Tuttle says. Part of that expertise comes from HellermannTyton’s purchase of UK-based RW Data in 2000.

The U.S. organization stays in sync with its UK headquarters and design group through regular meetings. “We will go over there; we agree on a design spec. We are in constant communication,” says Tuttle.

Tuttle says her company is beginning global tests of collaborative project management software. Among the 30 countries served by HellermannTyton, 12 have manufacturing operations.

“We go through distribution,” Tuttle says. “However, our company people are continually working with the end user on a consultative basis, the data center manager, so we can help with cabling design and installation.”

Distributors house HellermannTyton commodity items, including cable ties, connectors, and other data center cabling items, but because RapidNet cabling is custom-manufactured, it comes directly from the company’s Milwaukee operation.

In addition to its main U.S. Web site, the company has a site, www.htnetwork.com, that houses a large repository of product information. The site is divided into sections by type of product. The Cable Management Section includes an online RapidNet Estimator. According to Tuttle, the RapidNet Estimator is an easy way for data center managers and contractors to work up an order in preparation for a RapidNet installation. ■

THREE QUESTIONS

Providing Pro-Grade Power To The People

Seasonic Electronics Caters Power Supply Offerings To Multiple Markets

by Joseph Pasquini

BUILT UPON A DEDICATED foundation of research and development dating back to 1975, Seasonic Electronics (626/969-9966; www.seasonicusa.com) manufactures a wide range of high-quality power conversion products for the OEM, retail, and consumer market spaces. The company’s product lineup comprises an assortment of switching power supplies intended for use with workstations, servers, and rackmount applications, as well as adapters intended for use with various portable devices.

In 2002, the Taiwan-based Seasonic opened a U.S. branch office in Azusa, Calif. Since then, its premise of developing and delivering efficient power supplies has continued to flourish in concert with its increasing customer base, and in 2005, the company achieved the difficult 80 PLUS energy efficiency certification.

We recently spoke with Jeffrey Ho, account manager and specialist at Seasonic, about his company’s energy-based product lineup and the role that his firm plays within the SME arena.

■ What are the biggest IT-related issues facing today’s small to midsized enterprise?

According to Ho, every SME—if it wishes to achieve and maintain a pattern of stable growth in the face of today’s destabilizing economic forces—has an important role to play with regards to energy efficiency. “The problems often associated with small to midsize enterprises are closely connected with the constraints associated with governmental and environmental regulations,” says Ho. “As a result of the consequence of global warming and skyrocketing fuel prices, energy-saving products are now in high demand.”

Ho explains that Seasonic dedicates its time and resources to provide SMEs with what he likes to call the “Four Gs”: Great Technology, Great Quality, Great Service, and Great Price. “Not only does Seasonic provide outstanding service while maintaining long-term business partnerships with our customers, Seasonic’s products always stand for energy efficiency and environmental protection,” says Ho.

■ What should *Processor* readers know about your company’s products?

Ho recounts that Seasonic offers multiple series of power supplies available in a number of different form factors. Some of the model families include the ATX12V v2.2 Series (available with either 8cm or 12cm fans), the 1U/2U/4U rack-mount industrial series, and the Micro ATX small form factor series. Other Seasonic products include its open frame series and 60W single-output series of adapters.

While Seasonic’s product offering may be similar in nature to that offered by the competition, Ho contends that there are important differences worth noting. “What makes Seasonic stand out on its own is that our products feature 80 PLUS efficiency, as well as [an] RoHS European environmental safety certification, and are also Energy Star 4.0 ready,” says Ho. In addition, Seasonic power supplies are also PCI-E and SLI ready.

Featuring a double ball bearing fan assembly in conjunction with an intelligent speed controller, Seasonic’s

M12II and S12II power conversion products are also of interest to PC building enthusiasts. “Our unique low-noise cooling fan design is known to be Seasonic’s best selling point,” says Ho.

■ What makes your company unique?

Ho is proud of the research and development traditions implemented by his company. “Seasonic has been in the industry for more than three decades, specializing in [innovating] and producing a quality product lineup,” he says. “Seasonic Electronics was the very first 80 PLUS power supply manufacturer in the United States. In addition, Seasonic was also the first power supply company to make the transition from nonactive to the more efficient Active PFC (Power Factor Correction) technology.”

Ho believes Seasonic’s dynamic business practices demonstrate its level of commitment. “Safety certifications, special features, quality targets, and strong business concepts show how serious and dedicated we are to our product,” says Ho. “Seasonic’s products always stand for energy efficiency and environmental protection.”

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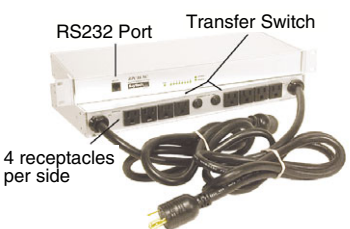


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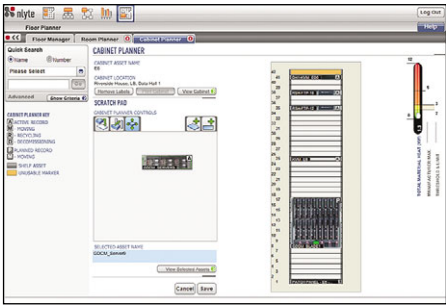
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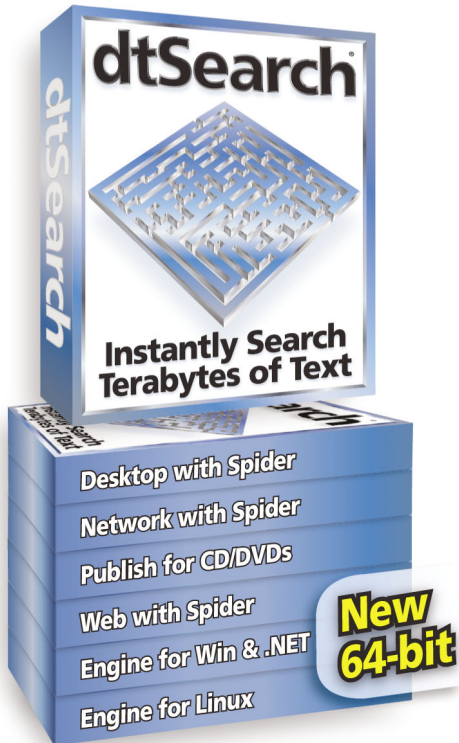
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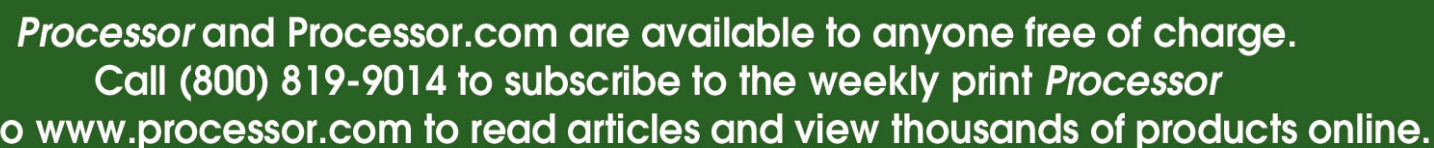
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Solving Virtualization's Pitfalls

Keeping Performance and Reliability on Your Virtual Machines

Virtualization has enormous potential to save companies money, time and space. However, like any innovation, there are bound to be a few snags and snares that prevent you from maintaining optimum performance and reliability. While virtualization promises efficiencies, it hardly guarantees performance. The anticipated evolution to large scale virtualization can only be made effective by understanding and seamlessly integrating this technology into the network. Success also hinges on the resolution of any reliability-threatening problems, like fragmentation, that will spring up.

Fragmentation 101

Fragmentation is a performance-crippling phenomenon. And, if left unchecked, it can lead to hangs, bottlenecks, freezes, crashes and total system failures. Disk fragmentation occurs when individual files are not stored in contiguous segments. To fit space restrictions, files are broken up and scattered around the hard disk. So the file system, whether in a virtual machine or not, has to generate more I/Os to address the excessive file fragments.

Pinpointing the Problem

Without a doubt, the more I/Os generated (and multiple virtual machines only exacerbate this), the more through-

put you'll need to account for in storage subsystems. Even with expansive, fully optimized SAN or RAID implementations underlying those virtual machines, poor disk performance is still regularly traced back to fragmentation. Virtualization pundits have been cautioning for some time about the major performance hit a host operating system takes from fragmentation. Fragmentation's side effects include I/O bottlenecks and the inefficient use of resources. These are two major pitfalls along the path towards virtualization. They limit the performance and reliability of virtual machines. And server virtualization actually compounds fragmentation. A fragmented virtual disk, in the same storage system as another fragmented virtual disk all on top of a fragmented logical disk, significantly increases the amount and severity of fragmentation's symptoms for the entire architecture. A misguided and somewhat instinctual response to fragmentation is to add more and more hardware (more hard drives, faster controllers) to fight off its effects. But this only mitigates the problem, and never solves it.

Solving Fragmentation

Diskeeper® 2008 with InvisiTasking™ technology automatically solves fragmentation in real time with absolutely



zero overhead. Management and downtime are things of the past. The breakthrough of InvisiTasking allows for defragmentation to be a completely transparent background process. Only untapped resources are used, so applications are never interrupted. Having Diskeeper running on your virtual machines eliminates I/O bottlenecks and ensures resources are used more efficiently. Combining virtualization's economical resource use with Diskeeper's transparent system enhancements leads to maximum productivity. Diskeeper will purge

your system of performance-wrecking fragmentation. Your systems, virtualized or not, will run with unparalleled performance and superior resource efficiency. The move to virtualization saves money and strategically allocates resources. Putting Diskeeper 2008 on your volumes is vital for a problem-free virtual infrastructure. See for yourself, download and try Diskeeper 2008 free for 45 days at www.diskeeper.com/vm. *Note: This special 45-day trialware is only available at www.diskeeper.com/vm.*

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▶ No scheduling required. Each volume is defragged with a strategy that matches its needs.

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